# **DRAFT**

# INITIAL STUDY MITIGATED NEGATIVE DECLARATION

PETALUMA ADOBE STATE HISTORIC PARK DIABLO VISTA DISTRICT OFFICE PROJECT

August 2003



State of California **DEPARTMENT OF PARKS AND RECREATION** 

Diablo Vista District 363 Third Street West Sonoma, California 95476

## MITIGATED NEGATIVE DECLARATION

PROJECT: DIABLO VISTA DISTRICT OFFICE PROJECT

PETALUMA ADOBE STATE HISTORIC PARK

SONOMA COUNTY, CALIFORNIA

**LEAD AGENCY:** California Department of Parks and Recreation

**AVAILABILITY OF DOCUMENTS:** The Initial Study/Mitigated Negative Declaration for this project is available for review at:

- Diablo Vista District Headquarters
   California Department of Parks & Recreation
   363 Third Street West
   Sonoma, California 95476
- Petaluma Regional Library 100 Fairgrounds Drive Petaluma, California 94952
- Sonoma Valley Regional Library 755 West Napa Street Sonoma, California 95476
- Northern Service Center
   California Department of Parks & Recreation
   One Capital Mall Suite 410
   Sacramento, California 95814
- California State Parks Internet Site <a href="http://www.parks.ca.gov/default.asp?page\_id=980">http://www.parks.ca.gov/default.asp?page\_id=980</a>

## **PROJECT DESCRIPTION:**

The Department of Parks and Recreation (California State Parks) proposes to construct a District Office on the grounds of the Petaluma Adobe State Historic Park. The following is a summary of the proposed work:

- Install up to three buildings on permanent foundations, totaling approximately 6,720 square feet, to serve as primary office space, and a fourth building, approximately 900 square feet in size, that would serve as an operations warehouse.
- Construct a parking lot to accommodate 50 vehicles adjacent to the offices; lot would include three handicapped spaces, with one van-accessible. Total size: approximately 20,000 square feet. Install walkways from parking area(s) to building(s) and other complex facilities, totally approximately 700 square feet. Walkways would be ADAcompliant.
- Install a septic system (including leach field) and connect to structure(s).

- Extend waterline from existing park facilities or connect to Petaluma City water line at Adobe Road. Connect to existing electric and telephone service at property boundaries; services would be undergrounded. Install a pressure tank system, if necessary, to achieve adequate pressure for fire suppression and irrigation.
- Install one driveway, encroaching on Casa Grande Road, for ingress/egress to facilities.

A copy of the Initial Study is incorporated into this document. Questions or comments regarding this Initial Study/Mitigated Negative Declaration may be addressed to:

Shaelyn Raab Strattan, Environmental Coordinator California Department of Parks & Recreation Northern Service Center One Capital Mall, Suite 500 Sacramento, California 95814

Pursuant to Section 21082.1 of the California Environmental Quality Act, the California Department of Parks and Recreation (DPR) has independently reviewed and analyzed the Initial Study and Negative Declaration for the proposed project and finds that these documents reflect the independent judgment of DPR. DPR, as lead agency, also confirms that the project mitigation measures detailed in these documents are feasible and will be implemented as stated in the Negative Declaration.

(Signature on file)	<u>8/25/03</u>
David A. Nelson District Superintendent	Date
(Signature on file)	_ 8/25/03
Shaelyn Raab Strattan Environmental Coordinator	Date

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# CHAPTER 1 INTRODUCTION

## 1.1 Introduction and Regulatory Guidance

The Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared by the California Department of Parks and Recreation (DPR) to evaluate the potential environmental effects of the proposed Diablo Vista District Office Project at Petaluma Adobe State Historic Park (SHP), Sonoma County, California. This document has been prepared in accordance with the California Environmental Quality Act (CEQA), Public Resources Code §21000 *et seq.*, and the State CEQA Guidelines, California Code of Regulations (CCR) §15000 *et seq.* 

An Initial Study is conducted by a lead agency to determine if a project may have a significant effect on the environment [CEQA Guidelines §15063(a)]. If there is substantial evidence that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) must be prepared, in accordance with CEQA Guidelines §15064(a). However, if the lead agency determines that revisions in the project plans or proposals made by or agreed to by the applicant mitigate the potentially significant effects to a less-than-significant level, a Mitigated Negative Declaration may be prepared instead of an EIR [CEQA Guidelines §15070(b)]. The lead agency prepares a written statement describing the reasons a proposed project would not have a significant effect on the environment and, therefore, why an EIR need not be prepared. This IS/MND conforms to the content requirements for such a statement under CEQA Guidelines §15071.

## 1.2 LEAD AGENCY

The lead agency is the public agency with primary approval authority over the proposed project. In accordance with CEQA Guidelines §15051(b)(1), "the lead agency will normally be an agency with general governmental powers, such as a city or county, rather than an agency with a single or limited purpose." The lead agency for the proposed project is DPR. The contact person for the lead agency, for general project information, is:

Dave Nelson or Roy McNamee Diablo Vista District Headquarters 363 Third Street West Sonoma, California 95476 707-938-1519 All inquiries regarding environmental compliance for this project should be addressed to:

Shaelyn Raab Strattan
California Department of Parks and Recreation
Northern Service Center
One Capital Mall, Suite 500
Sacramento, CA 95814

All comments regarding this environmental document must be in writing and may be submitted by regular mail to the address indicated above or by fax at (916) 445-9100; Attn: Shaelyn Raab Strattan. Submissions must be postmarked or received by fax no later than September 24, 2003. The originals of any faxed document must be received by regular mail within ten working days following the deadline for comments, along with proof of successful fax transmission during the designated comment period.

## 1.3 PURPOSE AND DOCUMENT ORGANIZATION

The purpose of this document is to evaluate the potential environmental effects of the proposed District Office Project at Petaluma Adobe SHP. Mitigation measures have also been incorporated into the project to eliminate any potentially significant impacts or reduce them to a less-than-significant level.

This document is organized as follows:

- Chapter 1 Introduction.
   This chapter provides an introduction to the project and describes the purpose and organization of this document.
- Chapter 2 Project Description.
   This chapter describes the reasons for the project, scope of the project, and project objectives.
- Chapter 3 Environmental Setting, Impacts, and Mitigation Measures.
   This chapter identifies the significance of potential environmental impacts, explains the environmental setting for each environmental issue, and evaluates the potential impacts identified in the CEQA Environmental (Initial Study) Checklist. Mitigation measures are incorporated, where appropriate, to reduce potentially significant impacts to a less-than-significant level.
- Chapter 4 Mandatory Findings of Significance
   This chapter identifies and summarizes the overall significance of any potential impacts to natural and cultural resources, cumulative impacts, and impact to humans, as identified in the Initial Study.

- Chapter 5 Summary of Mitigation Measures.
   This chapter summarizes the mitigation measures incorporated into the project as a result of the Initial Study.
- Chapter 6 References.
   This chapter identifies the references and sources used in the preparation of this IS/MND. It also provides a list of those involved in the preparation of this document.
- Chapter 7 Report Preparation
   This chapter provides a list of those involved in the preparation of this document.

## 1.4 SUMMARY OF FINDINGS

Chapter 3 of this document contains the Environmental (Initial Study) Checklist that identifies the potential environmental impacts (by environmental issue) and a brief discussion of each impact resulting from implementation of the proposed project. Based on the IS and supporting environmental analysis provided in this document, the proposed District Office Project would result in less-than-significant impacts for the following issues: aesthetics, agricultural resources, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, and utilities and service systems.

In accordance with §15064(f) of the CEQA Guidelines, a MND shall be prepared if the proposed project will not have a significant effect on the environment after the inclusion of mitigation measures in the project. Based on the available project information and the environmental analysis presented in this document, there is no substantial evidence that, after the incorporation and full implementation of the mitigation measures, the proposed project would have a significant effect on the environment. It is proposed that a Mitigated Negative Declaration be adopted in accordance with the CEQA Guidelines.

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# CHAPTER 2 PROJECT DESCRIPTION

## 2.1 Introduction

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared by the California Department of Parks and Recreation (DPR) to evaluate the potential environmental effects of the proposed Diablo Vista District Office Project at Petaluma Adobe SHP, located in Sonoma County, California. The proposed project would provide adequate office space at a centralized location to support continued administration and oversight of a consolidated and expanded District and its associated parks.

## 2.2 PROJECT LOCATION

The project would be located on a vacant parcel of land within Petaluma Adobe SHP, across Adobe Road from the historic Petaluma Adobe. The site is approximately one mile east of the Petaluma city limits, seven miles from the city of Sonoma, and 14 miles south of Santa Rosa. The land is situated in the open, rolling foothills of the Sonoma coastal mountains, in the Petaluma Valley. The project site would encompass approximately four acres of the 5.81-acre parcel, and is bounded by Casa Grande Road to the southeast, Adobe Road to the northeast, and agricultural and residential properties to the west. A single driveway would provide access to the site from Casa Grande Road. The property currently contains no structures or other development; a mature stand of eucalyptus extends over approximately one-half of the proposed site. The site is within one-quarter mile of the Petaluma Municipal Airport, in a semi-rural area supporting mixed residential, agricultural, industrial, recreational, and small business use.

## 2.3 BACKGROUND AND NEED FOR THE PROJECT

The Diablo Vista District of California State Parks is responsible for the operation and oversight of parks and DPR-owned and/or managed properties within all or part of Sonoma, Napa, Alameda, Contra Costa, Solano, and San Francisco counties. The District headquarters offices are currently located in Sonoma, which was relatively close to most of the park units managed by the smaller Silverado District. However, recent reorganization within the Department has resulted in substantial expansion of the District boundaries, consolidation of Districts, and the need for a larger, more centralized administrative headquarters. Location of the offices on park-owned property would also be more cost effective for the agency.

## 2.4 PROJECT OBJECTIVES

The intent of this project is to provide adequate, cost-effective office space for use by DPR personnel for the administrative duties associated with the management of the Diablo Vista District parks and properties.

## 2.5 PROJECT DESCRIPTION

DPR proposes to construct new office and warehouse space on property within the boundaries of the Petaluma Adobe SHP. The following is a summary of the proposed work:

- Install up to three buildings, totaling approximately 6720 square feet (ft²), to serve as primary office space, and a fourth building, approximately 900 ft² in size, that would serve as an operations warehouse. Buildings would be installed on permanent concrete slab foundations.
- Construct an asphalt concrete parking lot to accommodate 50 vehicles adjacent to the offices. Lot would include three handicapped spaces; one would be vanaccessible. Total size: approximately 20,000 ft<sup>2</sup>. Install walkways from parking area(s) to building(s) and other complex facilities, totally approximately 700 ft<sup>2</sup>. Walkways would be ADA-compliant.
- Install a septic system (including leach field) and connect to structures. Each office
  building would contain two restrooms, for a total of up to six restrooms. Depending
  on percolation test results, a standard septic tank and leach field or engineered
  mound system with approximately 250 linear feet of leach field would be installed
  adjacent to the office building(s).
- Extend waterline from existing well to service new facilities or connect to Petaluma
  City water line along Adobe Road. Install a pressure tank system, if necessary, to
  achieve adequate pressure for fire suppression and irrigation. Connect to existing
  electric and telephone service at property boundaries. Services would be
  undergrounded to building locations. Directional boring would be used to run
  waterlines and/or utilities beneath roadways, with above-ground trenching used for
  the remainder of the installations.
- Install one driveway, encroaching on Casa Grande Road, for ingress/egress to facilities. Driveway would be approximately 580 feet from the intersection with Adobe Road.

## 2.6 PROJECT IMPLEMENTATION

Construction for this project would begin in the Fall of 2003 and would take approximately four-six (4-6) months to complete; however, unfavorable conditions, such as inclement weather, could cause delays, extending construction into the summer of 2004. The site would be closed to the public during construction. Work would occur during daylight hours. Weekend and/or holiday work may be implemented to accelerate the construction schedule.

Heavy equipment, such as a backhoe, excavator, grader, bulldozer, and dump truck, would be used during construction. Most equipment would be transported to the site and remain until the associated work is completed. Staging areas for the project would be on the project site and adjacent paved access roads. Transport vehicles for building components, pilot car, material delivery trucks, and crew vehicles would also be present intermittently at the site.

## 2.7 Consistency with Local Plans and Policies

Because the project will occur within the boundaries of a state park, DPR has approval authority for the proposed Diablo Vista District Office Project at Petaluma Adobe SHP. The project is consistent with local plans and policies currently in effect, including the Sonoma County General Plan (1994) and the Petaluma Adobe SHP General Plan (1985). The park's General Plan (GP), approved in June 1985, envisioned the possible construction of a Visitor Center, offices, park entrance, and day use area (picnic and parking) on and adjacent to the proposed project site. Full implementation of the proposed facility development was dependent on the relocation of Adobe Road (and possibly, Casa Grande Road) to reconnect all three parcels of park property and provide safe pedestrian access across a very busy county road. Relocation of Adobe Road has proved infeasible since the GP was adopted and no development of this parcel (identified as Parcel #1 – Eucalyptus Grove in the GP) has occurred. Although it appears that development of a Visitor Center and relocation of the park entrance and visitor facilities to this site is unlikely, use of the site for office space is consistent with the remaining portion of the GP's development concept for this parcel. It was also noted in the GP (Extraneous Land in the Unit - Policy, pgs 26-27) that this area should be considered available for adaptive use, as long as that use would not constitute a visual intrusion on the historic scene; initial retention of a portion of the eucalyptus grove and future native plant restoration work would provide a visual barrier to prevent such intrusion.

## 2.8 DISCRETIONARY APPROVALS

The project site is within the Petaluma Municipal Airport landing pattern and would, therefore, require an Avigation Permit, acknowledging awareness of the safety and noise conditions within this area. An Aviation Easement may also be required to create a right for free and unobstructed passage of aircraft over the property above a specified altitude and a right to subject the property to noise, vibration, fumes, and other effects associated with normal airport activity. The height(s) of the proposed buildings do not exceed restrictions per Federal Aviation Regulation (FAR) Part 77, Sections 77.13 and 77.23; therefore, notification of the FAA administrator prior to construction is not required.

Design and installation of the proposed septic system would require approval and permitting by the Sonoma County Permit and Resource Management Department, and/or the San Francisco Bay Regional Water Quality Control Board (RWQCB).

Connection to the City of Petaluma water supply would require application to the Water District, staff review, and approval of the Petaluma City Council.

Because the project site exceeds one acre, consultation with the RWQCB would be necessary and a Stormwater Management Plan may be required.

Approval of plans by the Sonoma County Department of Emergency Services and installation of fire sprinklers, in accordance with a newly initiated Sonoma County Fire

Sprinkler Ordinance (effective May 27, 2003), may be required for some or all of the project buildings.

A permit for any temporary road closures or required traffic controls would be acquired from the Sonoma County Department of Transportation and Public Works, along with an Encroachment Permit to establish a driveway onto Casa Grande Road.

A Defensible Space Vegetation Management Plan would be prepared and implemented in compliance with County of Sonoma Department of Emergency Services (Fire Services) requirements.

The project would also adhere to all applicable local building and engineering regulations/ordinances set forth by Sonoma County and the California Uniform Building Code.

## 2.9 RELATED PROJECTS

DPR often has other smaller maintenance programs and rehabilitation projects planned for a park unit. At Petaluma Adobe SHP, this includes continued reconstruction/ rehabilitation of the rock foundations and veranda footings at the Petaluma Adobe. However, as noted earlier in this document, the parcel containing the proposed project site has remained fallow since it was acquired by DPR and no additional work is planned, except as included in this project, in the vicinity of the project site for the foreseeable future. Work at the Adobe would not contribute to direct or indirect impacts associated with this project.

In addition to work within Petaluma Adobe SHP, projects conducted by agencies other than DPR may also affect the project site and the significance of any potential impacts to the environment. Projects in the vicinity of the proposed project that are planned, in progress, or recently completed include:

- Asphalt concrete overlay on Arnold Drive, Adobe Road, and River Road; widening
  on River Road; and construction of metal beam guard railing is currently in progress.
  Adobe Road is the northeast boundary of the parcel containing the proposed project
  site and a cross street to Casa Grande Road. Work is being conducted by the
  Sonoma County Department of Transportation and Public Works.
- Installation of a 420MVA 230/115KV transmission transformer bank at the PG&E Lakeville Substation during Fall 2003.

# CHAPTER 3 ENVIRONMENTAL CHECKLIST

# **PROJECT INFORMATION**

1. Project Title: Diablo Vista District Office

2. Lead Agency Name & Address: California Department of Parks and Recreation

3. Contact Person & Phone Number: Dave Nelson or Roy McNamee (Project Managers)

707-938-1519

4. Project Location: Petaluma Adobe State Historic Park

Sonoma County, California

5. Project Sponsor Name & Address: California Department of Parks and Recreation

Diablo Vista District 363 Third Street West Sonoma, California 95476

6. General Plan Designation: State Historic Park (Classification)

Petaluma Adobe SHP General Plan (1985)

7. Zoning: Public Facilities District

Sonoma County General Plan (1994)

8. Description of Project:

DPR proposes to construct new office and warehouse space on the grounds of the Petaluma Adobe SHP. The following is a summary of the proposed work:

- Install up to three buildings on permanent foundations, totaling approximately 6,720 square feet, to serve as primary office space, and a fourth building, approximately 900 square feet in size, that will serve as an operations warehouse.
- Construct a parking lot to accommodate 50 vehicles adjacent to the offices; lot will include three
  handicapped spaces, with one van-accessible. Total size: approximately 20,000 square feet.
  Install walkways from parking area(s) to building(s) and other complex facilities, totally
  approximately 700 square feet. Walkways will be ADA-compliant.
- Install a septic system (including leach field) and connect to structure(s).
- Extend waterline from existing park facilities or connect to Petaluma City water line at Adobe Road. Connect to existing electric and telephone service at property boundaries; services will be undergrounded. Install a pressure tank system, if necessary, to achieve adequate pressure for fire suppression and irrigation.
- Install one driveway, encroaching on Casa Grande Road, for ingress/egress to facilities.

9. Surrounding Land Uses & Setting: Refer to Chapter 3 of this document (Section IX, Land Use

Planning)

10. Approval Required from Other

Public Agencies

Refer to Chapter 2, Section 2.8

1. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:			
The environmental factors checked below would be potentially affected by this project, involving at le one impact that is a "Potentially Significant Impact", as indicated by the checklist on the following page			
Aesthetics	ing		
DETERMINATION			
On the basis of this initial evaluation:			
I find that the proposed project <b>COULD NOT</b> have a significant effect on the environment and a <b>NEGATIVE DECLARATION</b> will be prepared.			
I find that, although the original scope of the proposed project <b>could</b> have had a significant effect on the environment, there <b>will not</b> be a significant effect because revisions/mitigations to the project have been made by or agreed to by the applicant. A <b>MITIGATED NEGATIVE DECLARATION</b> will be prepared.			
I find that the proposed project MAY have a significant effect on the environment and an ENVIRONMENTAL IMPACT REPORT or its functional equivalent will be prepared.			
I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated impact" on the environment. However, at least one impact has been adequately analyzed in an earlier document, pursuant to applicable legal standards, and has been addressed by mitigation measures based on the earlier analysis, as described in the report's attachments. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the impacts not sufficiently addressed in previous documents.			
I find that, although the proposed project could have had a significant effect on the environment, because all potentially significant effects have been adequately analyzed in an earlier EIR or Negative Declaration, pursuant to applicable standards, and have been avoided or mitigated, pursuant to an earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, all impacts have been avoided or mitigated to a less-than-significant level and no further action is required.			
(Signature on file) 8/25/03 Shaelyn Raab Strattan Date Environmental Coordinator			

## **EVALUATION OF ENVIRONMENTAL IMPACTS**

- 1. A brief explanation is required for all answers, except "No Impact", that are adequately supported by the information sources cited. A "No Impact" answer is adequately supported if the referenced information sources show that the impact does not apply to the project being evaluated (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on general or project-specific factors (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2. All answers must consider the whole of the project-related effects, both direct and indirect, including off-site, cumulative, construction, and operational impacts.
- 3. Once the lead agency has determined that a particular physical impact may occur, the checklist answers must indicate whether that impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate when there is sufficient evidence that a substantial or potentially substantial adverse change may occur in any of the physical conditions within the area affected by the project that cannot be mitigated below a level of significance. If there are one or more "Potentially Significant Impact" entries, an Environmental Impact Report (EIR) is required.
- 4. A "Mitigated Negative Declaration" (Negative Declaration: Less Than Significant with Mitigation Incorporated) applies where the incorporation of mitigation measures, prior to declaration of project approval, has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact with Mitigation." The lead agency must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level.
- 5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR (including a General Plan) or Negative Declaration [CCR, Guidelines for the Implementation of CEQA, § 15063(c)(3)(D)]. References to an earlier analysis should:
  - a) Identify the earlier analysis and state where it is available for review.
  - b) Indicate which effects from the environmental checklist were adequately analyzed in the earlier document, pursuant to applicable legal standards, and whether these effects were adequately addressed by mitigation measures included in that analysis.
  - c) Describe the mitigation measures in this document that were incorporated or refined from the earlier document and indicate to what extent they address site-specific conditions for this project.
- 6. Lead agencies are encouraged to incorporate references to information sources for potential impacts into the checklist or appendix (e.g., general plans, zoning ordinances, biological assessments). Reference to a previously prepared or outside document should include an indication of the page or pages where the statement is substantiated.
- 7. A source list should be appended to this document. Sources used or individuals contacted should be listed in the source list and cited in the discussion.
- 8. Explanation(s) of each issue should identify:
  - a) the criteria or threshold, if any, used to evaluate the significance of the impact addressed by each question **and**
  - b) the mitigation measures, if any, prescribed to reduce the impact below the level of significance.

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## **ENVIRONMENTAL ISSUES**

## I. AESTHETICS.

## **ENVIRONMENTAL SETTING**

Petaluma Adobe SHP is located in a semi-rural area along the eastern edge of the Petaluma River Valley, at the foot of the Sonoma Mountains. The project site is relatively flat land with mature eucalyptus covering approximately two-thirds of the parcel. Views from the property include the Petaluma Municipal Airport, a golf course, agricultural grazing land, vineyards and row crops, and up-scale residential properties to the north and west; rural residential housing to the west-southwest; additional housing, portions of the Adobe Creek Golf Course, and the Pacific Gas and Electric substation to the east-southeast; and the Petaluma Adobe and park grounds to the northeast. Views of the Adobe from the project site are partially blocked by the eucalyptus grove. While generally pleasant and pastoral, especially to the north, none of the views from the proposed project site would be considered a significant scenic vista. Neither Adobe Road or Casa Grande Road, which bound the site on the north and east, are designated scenic highways.

<b>W</b> oı	SIC	TENTIALLY GNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	<u>NO</u> IMPACT
a)	Have a substantial adverse effect on a scenic vista?			$\boxtimes$	
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?			$\boxtimes$	
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?				

## **DISCUSSION**

- a) As noted in the Environmental Setting above, none of the views of or from the proposed project site would be considered of significant scenic visual interest. Construction of the proposed structures would not block or interfere with local views from any existing buildings. Views of the parcel from the Adobe would remain relatively unchanged, as the remaining eucalyptus trees (or native vegetation used to replace the eucalyptus, as recommended in the park GP) would continue to provide screening of the proposed facility. Less than significant impact.
- b) The only potentially scenic resource associated with the proposed project site is the grove of eucalyptus trees that covers approximately two-thirds of the parcel. This grove was

originally planted in 1877 as a windbreak and source of fuel and lumber. It is an non-native (exotic) species that is considered locally invasive and a safety hazard, and removal of the grove is recommended as part of the park's natural resource management policy and General Plan. Revegetation of the area with indigenous or historically appropriate species is also recommended. While the grove has local presence, due to its longevity, this grove has no particularly unique characteristics and small groves of eucalyptus trees are relatively common in the Petaluma Valley. In addition, approximately one-third to one-half of the grove would remain following construction, maintaining the general appearance and presence of the existing stand. None of the roads surrounding or within view of the project site are a designated state scenic highway. Less than significant impact.

- c) The proposed site is vacant land; one-third is covered in low grasses and the remaining area by eucalyptus trees, with little understory growth. The proposed structures are equivalent in construction, appearance, and height to surrounding residential and light industry buildings and would be partially screened by the remaining trees and reintroduced native vegetation. As noted in Discussion I(b) above, approximately one-third to one-half of the grove would remain following construction, maintaining the general appearance and presence of the existing stand. Less than significant impact.
- d) It is expected that all construction work for the proposed project would be limited to daylight hours, eliminating the need for work lights. However, unavoidable delays or emergency situations could require minimal use of exterior construction lights on a limited basis. Glare shields would be used on all light sources and work areas would be confined to a maximum of a few hundred feet at any one time. Because the project site is directly beneath a final approach for the runway at Petaluma Municipal Airport, use of work lights would be coordinated with the airport management to avoid impacts to operations. Less than significant impact.

Both interior and exterior permanent lighting are components necessary for the operation of the completed facility, but exterior lighting would be limited to fixtures and levels necessary for security and public safety. The majority of facility use would occur during normal business (daylight) hours, reducing the amount of both interior and exterior illumination created during regular operation or after dark. Existing residences, industrial/farming buildings, the PG&E substation, and adjacent airport all maintain some level of interior, exterior, and security lighting within visual range of the proposed project. The lighting associated with this project would not add significantly to the current local or overall nighttime illumination of the area, create a defining point of illumination, or interfere with airport navigation equipment or landing operations at Petaluma Municipal Airport. Therefore, the project would have a less than significant impact.

## II. AGRICULTURAL RESOURCES.

## **ENVIRONMENTAL SETTING**

The proposed project location is within the boundaries of the Petaluma Adobe SHP and contains no lands zoned for agriculture. Adjoining properties to the north, northeast, and west of the site are zoned as a Diverse Agriculture (B6) and Land Extensive Agriculture (B6) districts, where small acreage intensive farming and part-time farming activities dominate, but where other diverse activities are allowed with a use permit. Current use includes grazing, vineyards, cultivation of row crops, and rural residential housing.

Would the project*:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), shown on the maps prepared pursuant to the Fa Mapping and Monitoring Program of the Californ Resources Agency, to non-agricultural use?	armland			
b) Conflict with existing zoning for agricultural use a Williamson Act contract?	or 🗌			
c) Involve other changes in the existing environme which, due to their location or nature, could resu conversion of Farmland to non-agricultural use?	ılt in			

<sup>\*</sup> In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997), prepared by the California Department of Conservation as an optional model for use in assessing impacts on agricultural and farmland.

## **DISCUSSION**

- a) None of the land within Petaluma Adobe SHP or area impacted by the proposed project is included in any of the Important Farmland categories, as delineated by the California Department of Conservation, under the Farmland Mapping and Monitoring Program (FMMP). No impact.
- b) The project is located wholly on State Park land and is not in conflict with existing zoning for agricultural use in the Sonoma County General Plan or any Williamson Act land contracts. No impact.
- c) No conversion of adjacent agricultural lands to non-agricultural uses would occur as a result of the project. Project improvements are solely on State Park land and involve limited development of non-agricultural property. No impact.

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## III. AIR QUALITY.

## **ENVIRONMENTAL SETTING**

Petaluma Adobe SHP is located in that portion of Sonoma County included in the San Francisco Bay Area Air Basin (SFBAAB), under the jurisdiction of the Bay Area Air Quality Management District (BAAQMD) and United States Environmental Protection Agency (USEPA) Region IX.

According to the BAAQMD, most areas in the district enjoyed relatively good air quality in 2000, with decreases in exceedances of State and federal standards for ozone and particulate matter (PM10, or particles with an aerodynamic diameter of 10 microns or less). For 2001, the BAAQCD was in attainment with California standards for carbon monoxide, sulfur dioxide, sulfates, and lead (particulate). An area is designated in attainment if the state standard for the specified pollutant was not violated at any site during a three-year period.

However, in 2001, according to data from the California Air Resource Board, the BAAQCD was not in non-attainment for ozone and PM10. Emissions of ozone precursors have decreased in the SFBAAB for both mobile and stationary sources, despite a significant increase in vehicle miles traveled (VMT) and overall ozone concentrations have decreased slightly for 1999 and 2000 (ARB Almanac 2002). An area is designated in non-attainment if there was at least one violation of a state standard for the specified pollutant within the area boundaries. The BAAQCD is currently unclassified for visibility-reducing particles (VRPs), but PM10 (which includes dust and smoke particles) is a VRP, indicating a possible reason for concern in this area. Many sources of PM10 are seasonal, so annual averages may give artificially low results.

With respect to federal standards, the BAAQCD is in a non-attainment zone for ozone; an unclassified/attainment zone for carbon monoxide, and unclassified for hydrogen sulfide and PM10.

Wou	JLD THE PROJECT*:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	<u>NO</u> <u>IMPACT</u>
a)	Conflict with or obstruct implementation of the applicable air quality plan or regulation?			$\boxtimes$	
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	,			
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project regio is in non-attainment under an applicable federal constate ambient air quality standard (including releasemissions which exceed quantitative thresholds frozone precursors)?	on or using			

	SIC	GNIFICANT	SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	<u>NO</u> IMPACT
d)	Expose sensitive receptors to substantial pollutant concentrations (e.g., children, the elderly, individuals with compromised respiratory or immune systems)?			$\boxtimes$	
e)	Create objectionable odors affecting a substantial number of people?			$\boxtimes$	

I EGG THAN

### **DISCUSSION**

- a) Work proposed by this project is not in conflict with and would not obstruct implementation of any applicable air quality management plan for Sonoma County or the BAAQMD. Less than significant impact.
- b,c) The proposed project would not emit air contaminants at a level that, by themselves, would violate any local, state, or federal ambient air quality standard (AAQS), or contribute to a permanent or long-term increase in any air contaminant. However, project construction would generate short-term emissions of fugitive dust (PM10) and involve the use of equipment that would emit ozone precursors (i.e., reactive organic gases [ROG] and nitrogen oxides, or NOx). Increased emissions of PM10, ROG, and NOx could contribute to existing non-attainment conditions and interfere with achieving the projected attainment standards. Consequently, construction emissions would be considered a potentially significant short-term adverse impact. Implementation of the following mitigation measures, in accordance with the BAAQMD guidelines, would reduce potential impact to a less than significant level.

## **MITIGATION MEASURE AIR-1**

- All active construction areas would be watered at least twice daily during dry, dusty conditions. Suspend any activities that cause visible dust plumes that cannot be controlled by watering.
- All trucks hauling soil, sand, or other loose materials would be covered or required to maintain at least two feet of freeboard.
- All equipment engines would be maintained in good condition, in proper tune (according to manufacturer's specifications), and in compliance with all State and federal requirements.
- Excavation and grading activities would be suspended when sustained winds exceed 25 mph; instantaneous gusts exceed 35 mph.

<sup>\*</sup> Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied on to make these determinations.

## MITIGATION MEASURE AIR-1 (CONT.)

- Sweep all access points to existing paved roads with water sweepers at completion of daily activities if visible soil material is deposited onto the adjoining roads.
- Revegetate disturbed areas as quickly as feasible following completion of construction.
- d) Individuals or groups that would be especially reactive to pollutants are considered sensitive receptors, such as children, the elderly, and those who are acutely or chronically ill. Facilities where these sensitive receptors are likely to be located include schools, playgrounds, childcare centers, retirement and convalescent homes, hospitals, medical clinics, and residences. The project is not located near any sensitive receptors, except for a single residence to the southwest. All schools are at least one-half mile from the project site. Any equipment use that could generate fugitive dust would be of limited duration, both in daily operation and as a percentage of the proposed work for this project. The project area would be closed to the public and it is expected that most or all of the work would occur during daylight hours. These conditions, combined with full implementation of the mitigation measures included in AIR-1 above, would result in a less than significant impact.
- e) The proposed work would not result in the long-term generation of odors. Construction-related emissions could result in a short-term generation of odors, including diesel exhaust and fuel or solvent vapors. These odors might be considered objectionable by some park personnel and adjacent residents. However, because construction activities would be short-term, odorous emissions would be limited and dissipate rapidly in the air, with increased distance from the source. The septic system proposed for this project would be in full compliance with the Sonoma County Environmental Health and Regional Water Quality Control Board requirements. A properly designed and operating septic system is not usually the source of unpleasant odors. The potential for impact during construction or operation of this project would be considered less than significant.

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## IV. BIOLOGICAL RESOURCES.

## **Environmental Setting**

Petaluma Adobe SHP is located at the base of Sonoma Mountain on a rural-urban interface with the edge of the City of Petaluma. Elevation at the project site ranges from approximately 95 to 130 feet above sea level (asl). The climate is a moderate Mediterranean type with a marine influence. Housing developments and a golf course to the south and southeast are near, but not adjacent, to the project site. Land on the western boundary of the property is used primarily for grazing and rural, residential housing. The project location is on the west side of the intersection of Adobe Road and Casa Grande Road, across the street from the historic Petaluma Adobe.

Primary vegetative cover consists of a decadent grove of exotic blue gum eucalyptus (*Eucalyptus globulus*). The understory and open surrounding area contain annual and perennial exotic grasses (Bromus sp.) with some herbaceous plants, such as the exotic weeds, pennyroyal (*Mentha pulegium*), and Italian thistle (*Carduus pycnocephalus*). There is also some native miner's lettuce (Claytonia perfoliata). Site surveys indicate no special status species of plants exist in the project area.

## SPECIAL-STATUS SPECIES<sup>1</sup>

Sensitive biological resources that occur or potentially occur on the proposed project site are discussed in this section.

A query of the California Department of Fish and Game's Natural Diversity Database (CNDDB, January 2003) was conducted for sensitive species and habitats within the Petaluma River and Glen Ellen 7.5-minute U.S.G.S. quadrangle maps. Included in the search were species listed in a query of the US Fish and Wildlife Service (USFWS) Sacramento office website (http://sacramento.fws.gov/es/spp\_lists/QuadName\_Search.cfm) for the Glen Ellen 7.5-minute U.S.G.S. quadrangle (June 5, 2003) and California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants of California, August 2001. Also included were habitats that are listed as critical for the survival of a listed species or have special value for wildlife species and plant communities that are unique or of limited distribution.

Nineteen special-status plant species, 13 special-status wildlife species, and 3 sensitive plant communities appear in the CNDDB for the Glen Ellen and Petaluma River U.S.G.S quadrangle map. Of these, none of the plant species and none of the plant communities are known to occur within Petaluma Adobe SHP or the project site. One federally threatened fish and one

<sup>&</sup>lt;sup>1</sup> For the purposes of this document, special-status species are defined as plants and animals that are legally protected or that are considered sensitive by federal, state, or local resource conservation agencies and organizations. Specifically, this includes species listed as state or federally Threatened or Endangered, those considered as candidates for listing as Threatened or Endangered, species identified by the USFWS and/or CDFG as Species of Concern, animals identified by CDFG as Fully Protected or Protected, and plants considered by the California Native Plant Society (CNPS) to be rare, threatened, or endangered (i.e., plants on CNPS lists 1 and 2).

amphibian species of special concern are known to occur in the park, but are not found within the project site. Five raptor species of special concern, two of which are fully protected, are known to occur in the project area.

## Threatened and Endangered Species and Species of Special Concern

Threatened and Endangered plants and wildlife species and Species of Concern are specialstatus species that have legal protection. The following Threatened and Endangered species and Species of Concern are the result of the CNDDB and CNPS Inventory queries for the two quadrangle maps mentioned above and USFWS Sacramento office website for the Glen Ellen quadrangle.

## **Plant Species**

Of the 19 potential sensitive plant species identified from the CNDDB and CNPS Inventory search, all were eliminated from consideration due to lack of suitable habitat in the project area. Specifically, this is based on lack of serpentine and or volcanic soils, the lack of salt marsh, broadleaf upland forest or chaparral habitats, lack of vernal pool wetlands, the extreme rarity of species existing in a few known locations not within the vicinity, or that the only known occurrence in the area and/or last confirmed sighting was in 1880 in Petaluma, making presence of the species extremely unlikely.

## Wildlife Species

## **Aquatic Species**

Adobe Creek flows through Petaluma Adobe SHP and continues south and west of the project area. It does not cross or abut the proposed project location. The CNDDB indicates that Adobe Creek supports the federally threatened Central California Coast steelhead trout (*Oncorhynchus mykiss irideus*) and California species of special concern, foothill yellow-legged frog (*Rana boylii*). There is steelhead habitat throughout most of the reach of Adobe Creek. Although historic grazing has resulted in downcutting and erosion of the streambed, tree planting throughout the system in recent years has created a narrow strip of vegetation, which has improved shade cover for fish and reduced erosion.

The stream has also been the focus of over a decade of community riparian restoration efforts by a local high school, and has established a fish hatchery for both steelhead and chinook salmon (*Onocorhynchus tshawytscha*). The portion of Adobe Creek in the vicinity of the park does not support suitable chinook breeding habitat and, while chinook are a part of the fishery program, they are not released into Adobe Creek. However, stray chinook salmon from runs in other parts of the Bay area have been observed in Adobe Creek, near the confluence with the Petaluma River (NMFS, 2000).

The stream provides potential habitat for federally threatened California red-legged frog (*Rana aurora draytonii*) and western pond turtles (*Clemmys marmorata*), federal and state species of concern. Both of these species have been found at locations within a few miles of the project

site. However, the dense Eucalyptus grove on the project site and adjacent grasslands do not provide suitable upland habitat for either species.

The following other aquatic or riparian dependant species were identified in the CNDDB search and other queries: Western Yellow-billed Cuckoo (*Coccyyzus americnus occidentalis*), Tomales Isopod (*Caeciotea tomalensis*), California Freshwater Shrimp (*Syncaris pacifica*) and Ricksekecker's water scavenger beetle (*Hydrochara ricksecker*)). While potential habitat exists for Western Yellow-billed Cuckoo, it is unlikely that they nest along Adobe Creek due to the lack of mature trees, the species composition mixture, and the narrow size of the riparian edge. Ricksekecker's water scavenger beetle was eliminated from consideration because it has not been seen since 1955, outside of the only recent sighting at Jepson Prairie. Potential habitat exists in suitable microhabitats along the stream for Tomales Isopod (*Caeciotea tomalensis*) and California Freshwater Shrimp (*Syncaris pacifica*); however, stream monitoring programs and other surveys have not identified their presence to date.

## **Birds/Mammals**

The Petaluma region is adjacent to tidally influenced salt marsh and offers a variety of bird habitats. The agricultural lands surrounding Petaluma Adobe SHP and the project location support common small mammal populations, which provide food for several raptor species. Sightings of sensitive raptor species with potential for nesting in the eucalyptus grove and adjacent grassland at the project site include: Cooper's hawk (*Accipiter cooperi*), Northern Harrier (*Circus cyaneus*), Ferruginous hawk (*Buteo regalis*), and white-tailed kite (*Elanus leucurus*). Also known to exist in the area are Golden Eagles (*Aquila chrysaetos*), which nest in the upper reaches of the watershed on Sonoma Mountain. Other non-listed raptor species that have been sighted in the eucalyptus grove, include the Great horned owl (*Bubo virginianus*), red-tailed hawk (*Buteo jamaicensis*), and American Kestrel (*Falco sparverius*). General surveys (Evans 2003) indicate that the eucalyptus grove provides temporary roosting sites, but is unlikely to provide nest sites for sensitive species. Nesting season for these species occurs from February through June.

Suitable wetland habitat does not occur in or adjacent to the project area; therefore, the California black rail (*Laterallus jamaicensis coturniculus*), Saltmarsh common yellowthroat (*Icteria virens*) and Saltmarsh harvest mouse (*Reithorodonimys raviventris*) are not expected to inhabit the area.

The Northern Spotted Owl (*Strix occidentalis carina*) was eliminated from consideration due to lack of old growth, second growth coniferous forest, or mixed coniferous forest in or adjacent to the project site.

## **SENSITIVE NATURAL COMMUNITIES**

Sensitive natural communities are those that are regionally uncommon, unusually diverse, or of special concern to local, state, and federal agencies. Elimination or substantial degradation of these communities would constitute a significant impact under CEQA. The CNDDB query lists Northern Vernal Pool, Coastal Brackish Marsh and Northern Coastal Salt Marsh as sensitive plant communities that exist within the Petaluma River and Glen Ellen 7.5 quadrangles. No sensitive natural communities are found at the project site.

## WETLANDS AND WATERS OF THE UNITED STATES

There are no wetlands present at or adjacent to the project site.

ISSUE		POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT NO IMPACT IMP	<u>)</u> ACT
IV.	BIOLOGICAL RESOURCES. Would the project:				
a)	Have a substantial adverse effect, either directly through habitat modification, on any species identified as a sensitive, candidate, or special staspecies in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or the U.S. Fish and Wildlife Services	itus			
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community iden in local or regional plans, policies, or regulations, by the California Department of Fish and Game of the U.S. Fish and Wildlife Service?	tified or			
c)	Have a substantial adverse effect on federally protected wetlands, as defined by §404 of the Cle Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife specie or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	s			
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation, or other approved local, regional, or state habitat conservation plan?				

## **Discussion**

a) (i) As discussed above in the environmental setting, no sensitive, candidate, or special status plant species are known to occur within Petaluma Adobe SHP or the project site. However, this project proposes to remove multiple sapling size and about 20-30 large mature, non-historical, exotic invasive eucalyptus trees (up to two-thirds of the existing

grove) to clear the site, prior to construction. This is consistent with the Petaluma Adobe SHP General Plan (1985, p21). The grove is decadent and detracts from interpretation of the historic period. It also poses a hazard to public safety from limb fall. Once construction is completed, disturbed areas would be vegetated with native plant species to protect against excessive soil erosion, loss of topsoil, and intrusion of invasive plants. Trees and shrubs introduced as part of the revegetation/landscaping process, along with remaining eucalyptus trees, would provide alternative habitat for species currently using or inhabiting the eucalyptus grove. Revegetation and landscaping plans would be developed with oversight from the District resource ecologist. Less than significant impact.

(ii) Up to two-thirds of the existing eucalyptus grove on the project site would be removed in preparation for construction; the remaining grove would be retained as habitat, and as a visual screen between the office complex and the Petaluma Adobe. As noted in the Environmental Setting above, sensitive raptor species, as well as several non-listed raptors, have been identified within the eucalyptus grove and surrounding agricultural areas. General surveys, to date, have indicated that it is likely the grove is only used for temporary roosting. Although studies indicate the grove is unlikely to provide nest sites for sensitive species, the potential still exists for this use by one or more of the sensitive raptor species. The removal of trees outside the nesting season (February 15 - June 1) would have a less than significant impact on those species using the grove for temporary roosts or potential nesting sites. However, removal of trees during the nesting season could result in a potentially significant impact. Implementation of the following mitigation measures would reduce any potential impact to a less than significant level.

## **MITIGATION MEASURE BIO-1**

- If tree removal is necessary during the nesting season (February 15 June 1), preconstruction surveys would be conducted under the supervision of the District
  resource ecologist to determine if nesting birds are present. If nests are identified,
  trees containing nests would be flagged and a buffer zone established around the
  tree(s) to prevent disturbance. No trees containing nests would be removed during
  the nesting season.
- (iii) Adobe Creek is greater than 100 meters from the closest portion of the project area. Although the creek is within the 100-year flood hazard area (zoned F2, Sonoma County GP, Sec. 26-58-010), the project site is not within the 100-year flood plain. No aquatic, riparian, or suitable wetland habitat exists within the project site.

Adobe Creek and the surrounding habitat is dependent, to some extent, on the stability of water table levels fed by an aquifer underlying the area. This aquifer is also the source of water for the well that currently serves Petaluma Adobe SHP; this well could potentially provide water for consumption, irrigation, and fire protection for the new office complex as well. The well is only one alternative water source; connection to the Petaluma City Water system is also under consideration. Connection to an outside water supply would not impact aquifer levels in the Adobe Creek area. However, use of the well as the primary water source would increase water demand following occupancy of the new offices, which

could result in reduced aquifer and local water table levels, and potentially significant impacts to sensitive fish and other aquatic and riparian species in the creek. (see Section VIII. Hydrology and Water Quality). Implementation of Mitigation Measures Hydro-2 would reduce any potential impact to a less than significant level.

- (iv) Although not listed as a sensitive species, the Monarch butterfly (Danaus plexippus) is considered a species of special concern and receives various levels of local protection during its annual migration and winter roosting periods. Blue gum eucalyptus, as found on the project site, is considered a primary habitat for winter roosts in California. However, there are no known roost sites within the park boundaries or in any area impacted by the proposed project. Sufficient eucalyptus trees would remain in the grove to provide roosting habitat, should monarchs relocate to the area. Less than significant impact.
- b) The project area is outside of the floodplain for Adobe Creek. Neither riparian habitat nor sensitive natural communities are present within the project site. Mitigation Measures HYDRO-2 would reduce any potential impact to habitat or natural communities adjacent to Adobe Creek as a result of reduced water table levels to a less than significant level [see Discussion IV(a)(iii) above].
- c) No wetlands occur within the project boundaries or area immediately surrounding the project site; no project activities would result in an impact to any wetlands in the area. No impact.
- d) As noted in both the Environmental Setting and Discussion IV(a) above, the eucalyptus grove on and adjacent to the project site may be used by raptors and other bird species for temporary roosts and may be suitable habitat for wintering roosts for Monarch butterflies. Removal of designated eucalyptus trees or other proposed project work would not interfere with the routine movement of these species or the annual Monarch migration. No impact.

The project site is also close to a creek that supports the federally threatened Central California Coast steelhead trout. Any interference with the normal flow of water in Adobe Creek could result in a significant impact to the movement of steelhead trout. However, Mitigation Measures HYDRO-2 would reduce any potential impact to Adobe Creek as a result of reduced water table levels to a less than significant level [see Discussion IV(a)(iii) above].

Proposed project activities would not interfere with the movement of any other native resident or migratory fish, wildlife species, or established native resident or migratory wildlife corridors.

- e) The proposed project would not conflict with any local policies, plans, or ordinances protecting biological resources. The project site is within an area designated as Valley Oak Habitat. However, no Valley Oaks are present on the property or would be affected by the project. No impact..
- f) See IV (e) Discussion above. No impact.

## V. CULTURAL RESOURCES.

## **Environmental Setting**

The Petaluma Adobe SHP is located in Sonoma County and is comprised of 41 acres of State Park System Land. The park is situated in the open, rolling foothills of the Sonoma coastal mountains in the eastern edge of Petaluma Valley. The park is divided into three parcels. The project area is located in the smallest parcel, southwest of the adobe and north of Casa Grande Road. Although there are no recorded archaeological or historical resources located in the immediate project area, the park does contain a high level of historic and archaeological sensitivity.

The primary historic resource at Petaluma Adobe SHP is the Adobe. The Petaluma Adobe is one of the oldest preserved buildings in northern California and, by all accounts, the largest and richest privately owned Mexican estate north of San Francisco Bay. Between 1822 and 1846, more than 800 California land grants were made to individuals by the Mexican government. Rancho Petaluma was one of those grants and was established in 1834. The grantee was Mariano Guadalupe Vallejo, who was the commandant of the presidio at San Francisco. Originally, Rancho Petaluma consisted of about 44,000 acres, but increased to more than 66,000 acres by 1844. At this time, Vallejo was the wealthiest man in Northern California. The main economic activity of the rancho revolved around the hide and tallow trade. However, the rancho also included an expansive farm and associated factories. In 1857, Vallejo sold the Adobe and a 1,600-acre parcel to William H. Whiteside.

Construction of the Adobe began in 1836 and was completed in 1846. After its construction, the Adobe housed dozens of people, including members of Vallejo's militia and hundreds of Native American laborers. Part of the original Petaluma Adobe site remains; however, historical evidence indicates the standing structure represents only half of the original structure, which included another wing to the east, as well as other outbuildings and adobe corrals. Documentation from the 1950s suggests there was a historic-era rancheria located east of Adobe Creek, where local Native Americans laborers for Vallejo lived. However, archaeological surveys have not revealed any surface evidence to support this claim. Only two historic adobes have been located in the vicinity of the rancheria. Other historical resources located during cultural inventories were the location of a granary and a flourmill. As noted above, there is no evidence of structures on the parcel containing the project site.

Although archaeological surveys have been conducted in the park, only one Native American site has been recorded at Petaluma Adobe SHP. The site, CA-SON-1281, was recorded as a prehistoric hearth eroding into the east side of Adobe Creek in 1980-81. Excavation of the site in 1982 determined the site to be a human cremation buried in a rock-lined pit. Archaeological testing conducted in the project area did not reveal a subsurface prehistoric deposit in the area of potential effect (APE). Although within park boundaries, this site is not adjacent to the proposed project location.

		POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
Wou	LD THE PROJECT:				
a)	Cause a substantial adverse change in the significance of a historical resource, as defined in §15064.5?				
b)	Cause a substantial adverse change in the significance of an archaeological resource, pursua to §15064.5?	□ ant			
c)	Disturb any human remains, including those interroutside of formal cemeteries?	ed 🗌	$\boxtimes$		

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## **DISCUSSION**

- a) Although the project area is located within the original 44,000 acres of the historic Rancho Petaluma land grant, a grove of eucalyptus trees is the only historic resource present on or immediately adjacent to the project site. This historic grove of blue gum eucalyptus was planted around 1877, as an introduced species from Australia. Although this grove was planted over 100 years ago, it does not contribute to the Petaluma Adobe's historic standing as a National Register Property and is not considered historically significant. Less than significant impact.
- b) No known archaeological sites have been identified in the APE. Archaeological testing was conducted in the project area by Pacific Legacy, a cultural resource management firm under a contract with Pacific Gas & Electric Company (PG&E) in 1998. The area was not found to be sensitive for archaeological resources. Therefore, it is unlikely that any archaeological resources would be encountered or adversely impacted by this project.

However, given the proximity of APE to the Petaluma Adobe and documented prehistoric sites in the area east of Adobe Creek, ground-disrupting activities could inadvertently expose and significantly impact previously unrecorded prehistoric or historic features or archaeological resources. Implementation of Mitigation Measure CULT-1 would reduce any potential impacts to a less than significant level.

## **MITIGATION MEASURE CULT-1**

 A DPR-qualified cultural resource specialist would monitor all ground-disturbing work. If potentially significant resources are unearthed, work in the immediate area of the find would be temporarily halted or diverted until identification and proper treatments are determined and implemented. The DPR Service Center or District Cultural Resource Section would be notified a minimum of three weeks prior to the start of ground-disturbing work to schedule monitoring, unless other arrangements are made in advance. c) No human remains or burial sites have been documented in the immediate vicinity of the project area. However, because the APE is located in a historic park unit with a prehistoric component, including a Native American burial site, there is a potential of inadvertently discovering other previously unknown burials. If any human remains or burial artifacts are identified, implementation of Mitigation Measure CULT-2 would reduce any potential impacts to a less than significant level.

## **MITIGATION MEASURE CULT-2**

In the event that human remains are discovered, work would cease immediately in the area of the find and the project manager/site supervisor would notify the appropriate DPR personnel. Any human remains and/or funerary objects would be left in place or returned to the point of discovery and covered with soil. The DPR Sector Superintendent (or authorized representative) would notify the Country Coroner, in accordance with 7050.5 of the California Health and Safety Code, and the Native American Heritage Commission (or Tribal Representative. If a Native American monitor is on-site at the time of the discovery, the monitor would be responsible for notifying the appropriate Native American authorities.

If the coroner or tribal representative determines the remains represent Native American interment, the NAHC in Sacramento and/or tribe would be consulted to identify the most likely descendants and appropriate disposition of the remains. Work would not resume in the area of the find until proper disposition is complete (PRC 5097.98). No human remains or funerary objects would be cleaned, photographed, analyzed, or removed from the site prior to determination.

If it is determined the find indicates a sacred or religious site, the site would be avoided to the maximum extent practicable. Formal consultation with the State Historic Preservation Office and review by the Native American Heritage Commission/Tribal Cultural representative would also occur as necessary to define additional site mitigation or future restrictions.

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## VI. GEOLOGY AND SOILS.

## **Environmental Setting**

## Location and Topography

The proposed location for the new Diablo Vista District office is within the boundaries of Petaluma Adobe SHP, approximately one mile east of the town of Petaluma (see Figure VI-1). The site is located along Casa Grande Road, in a grove of eucalyptus trees, near the intersection with Adobe Road (see Figure VI-2). This is along the eastern edge of the Petaluma Valley, at the base of the foothills of the Sonoma Mountains, at an elevation of approximately 110-130 feet mean sea level (msl). The topography at the site slopes to the west and south (3% to 4% slopes) toward the Adobe Creek drainage. The topography steepens to the east toward the Sonoma Mountains.

## Site Geology

The project site is located in the California Coast Range Geomorphic Province, a northwest-trending chain of mountains and valleys that formed primarily as a result of movement along the San Andreas Fault and associated faults. According to the Park's General Plan (DPR, 1985), the project site is underlain by the Petaluma Formation, a late Miocene to Pliocene (approximately 5 to 6 million years old) deposit consisting of clay, shale, sandstone, and minor conglomerate, limestone, and diatomite beds that formed in a fluvial (fresh) to brackish water environment (Ford, 1975) (Allen, 2003). The Petaluma Formation has yielded both invertebrate (gastropods, pelecypods, ostracodes, and diatoms) and vertebrate (horses, camels, birds) fossils (Allen, 2003).

## Soils

Haire gravelly loam, Clear Lake clay loam, and Clear Lake clay are the predominate soils at the Petaluma Adobe (DPR, 1985). The Adobe Creek drainage is identified as gullied land. The Clear Lake soils have slow runoff, slow permeability, and slight erosion hazard. The Haire soil has slow to rapid runoff, very slow permeability, and a slight to moderate erosion hazard. These soils may have a high shrink-swell potential and could cause damage to building foundations (DPR, 1985). Due to the low permeability, these soils may be unsuitable for standard leach field design.

## Seismicity

The project area is located within the seismically active north San Francisco Bay region. Several major active faults of the San Andreas system, capable of generating large earthquakes, surround the project area (see Figure VI-3). The nearest known fault (potentially active) is the Tolay Fault, located 0.6 mile west of the Petaluma Adobe (DPR, 1985). This fault originally was designated within an Alquist-Priolo Earthquake Fault Zone, but it has since been removed (City of Petaluma, 1987). The Rodgers Creek Fault is located approximately three miles to the northwest and the San Andreas Fault Zone is located 18 miles to the west. No known active faults have been identified underlying the project site (Jennings, 1994).

The Seismic Shaking Hazard Map (Petersen, 1999) shows that the project site lies within a zone that has a 10% probability of experiencing moderate to strong shaking on the order of 0.7 g to 0.9 g (acceleration due to gravity) within 50 years.

<b>W</b> ou	JLD TH	IE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	<u>NO</u> IMPACT
a)	adver or dea i) R de E S su (F	se people or structures to potential substantial se effects, including the risk of loss, injury, ath involving: upture of a known earthquake fault, as elineated on the most recent Alquist-Priolo arthquake Fault Zoning Map, issued by the tate Geologist for the area, or based on other ubstantial evidence of a known fault? Refer to Division of Mines and Geology pecial Publication 42.)				
	ii) S	trong seismic ground shaking?		$\boxtimes$		
		eismic-related ground failure, including quefaction?				
	iv) La	andslides?			$\boxtimes$	
b)	Resul topso	t in substantial soil erosion or the loss of il?				
c)	or that project lands	cated on a geologic unit or soil that is unstable t would become unstable, as a result of the ct and potentially result in on- or off-site lide, lateral spreading, subsidence, action, or collapse?	, 🗆			
d)	Table	cated on expansive soil, as defined in 18-1-B of the Uniform Building Code (1997), ng substantial risks to life or property?				
e)	of sep where	soils incapable of adequately supporting the uptic tanks or alternative waste disposal systems as sewers are not available for the disposal of water?				
f)		tly or indirectly destroy a unique ntological resource or site, or unique geologic re?				

# **DISCUSSION**

a) The chance of the rupture of a known earthquake fault, strong seismic ground shaking, or seismic-related ground failure is certainly possible in the project area. An earthquake of unknown magnitude severely damaged the Petaluma Adobe in September of 1855 (DPR, 1985). All who live and/or work in this area are exposed to an increased risk from earthquake-related geologic hazards. This would also be true at this site, for both construction workers and staff using the buildings once they are completed. However, implementation of GEO-1 below would reduce the potential adverse impacts to a less than significant level.

- i) The project site is not located on or immediately adjacent to an active fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning (APEFZ) Map from the California Geological Survey. However, unknown faults could underlie the site. The recent (May 26, 2003) 4.3 magnitude earthquake that occurred east of Santa Rosa was on a splay fault between the Rodgers Creek and the Healdsburg faults. Since no APEFZ faults have been identified near the site, the risk from surface fault rupture is considered to be less than significant.
- ii) The California Geological Survey has determined that the Rodgers Creek Fault Zone is capable of generating an earthquake with a Maximum Moment Magnitude of 7.2. The San Andreas Fault Zone is capable of generating an earthquake with a Maximum Moment Magnitude of 8.3. The expected ground acceleration at the project site is on the order of 0.7g to 0.9g (Petersen, 1999). Earthquake scenario maps from ABAG (2003) indicate very strong to violent shaking could be experienced at the project site if a 7.0 earthquake should occur on the Rodgers Creek Fault. A 7.9 quake on the San Andreas (1906 rupture zone) would generate strong to very strong shaking.

The Petaluma Adobe General Plan (1985) states that "[N]ew buildings within the boundaries of Petaluma Adobe State Historic Park shall be constructed to withstand a Richter magnitude 7.0 earthquake, with repeatable ground acceleration of 0.33 gravity (g). The expected maximum peak horizontal bedrock acceleration for a seismic event of magnitude 7.0 would be approximately 0.5 g." Implementation of Mitigation Measure GEO-1 below would meet that requirement, reducing any potential impact to a less than significant level.

- iii) Seismic-induced ground failure, such as liquefaction, usually occurs in unconsolidated granular soils that are water saturated. During seismic-induced ground shaking, pore water pressure can increase in loose soils, causing the soils to change from a solid to a liquid state (liquefaction). The upper soils in the project area may be loose, but the depth to groundwater is unknown. The ABAG map for Petaluma (2001) indicates that the project area is on a boundary between very low to high hazard for liquefaction. Implementation of Mitigation Measures GEO-1 and GEO-2 would reduce this potential risk to less than significant.
- iv) No known landslides have occurred or have been mapped at the proposed project site. The topography has a relatively gentle slope. A less than significant impact would be expected for this site. However, implementation of GEO-1 and HYDRO-4 would address any increased risk indicated by the results of the proposed geo-technical investigation.

# MITIGATION MEASURE GEO-1 - SEISMIC BUILDING DESIGN CRITERIA

- Structures and foundations proposed as part of this project would conform to the earthquake design requirements in Chapter 16, Division IV of the most recent accepted edition of the California Building Code (CBC). The design criteria would be for Seismic Zone 4, adapted for soil type [possibly S<sub>D</sub> (stiff soil)] as indicated in Table 16-J, of the 2001 CBC. The information from the proposed geo-technical investigation indicated below would determine the actual soil type present.
- A geotechnical site investigation would be conducted prior to finalizing design
  plans to determine soil type, depth to groundwater, liquefaction potential,
  presence of undesirable expansive soils, and potential for landslides. If it is not
  feasible to conduct an investigation prior to the start of construction, the worstcase scenario for seismic impact would be assumed (liquefaction possible,
  expansive clay soils present) and designs adjusted accordingly.
- b) A temporary increase in erosion may occur during the excavation and grading for the building foundations, parking lot, leach field, and utility trench excavations. Topography would be changed due to site grading. The elevation changes by 30 feet over the project site. With the implementation of Mitigation Measure GEO-2 below, any contribution to substantial soil erosion or loss of topsoil by the proposed project would be reduced to a less than significant level.

# MITIGATION MEASURE GEO-2 EROSION CONTROL

- DPR, Sonoma County, NPDES, and/or San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) approved Best Management Practices (BMPs) would be used in all areas to control soil and surface water runoff during excavation, trenching, and grading. If ground disturbing operations must occur during the rainy season (October 31 to May 1), or if unseasonable storms are anticipated during construction, "winterizing" would occur, including the covering (tarping) of any stockpiled soils and the use of temporary erosion control methods to protect disturbed soil.
- Temporary erosion control measures would be used during all soil disturbing activities and until all disturbed soil has been stabilized (re-compacted, revegetated, etc.) This would include, but not be limited to, the use of silt fences, straw bales, or straw or rice coir rolls to prevent soil loss and siltation into nearby water bodies.
- Permanent erosion controls would be implemented, including proper compaction and revegetation of disturbed soil areas, as soon as feasible following construction.

# MITIGATION MEASURE GEO-2 (CONT.)

- The State's contractor(s) would provide an erosion control plan, including any proposed BMPs for DPR review and approval, prior to the start of any construction. DPR staff would follow previously approved BMPs.
- Site drainage would be directed to the southwest, away from Adobe Creek, with specifics identified on construction plans and in any required Storm Water Management Plan.
- c) The project is potentially located on a soil unit that may be subject to liquefaction, as noted in Discussion VI(1)(iii) above. Implementation of Mitigation Measures GEO-1 would reduce this impact to less than significant.
- d) Expansive soils may be a problem at the project site, according to the General Plan (DPR, 1985) and the descriptions of the soils present. Implementation of Mitigation Measure GEO-1 above would determine if unsuitable soils are present. If these soils are present, or if testing cannot be completed prior to final design approval, engineering designs would incorporate measures to reduce the potential for damage or risk, as noted above. These design modifications would reduce this impact to a less than significant level.
- e) The project includes the installation of a septic system and leach field. The site soils, according to the Petaluma Adobe General Plan (DPR, 1985) have low permeability and may not be suitable for a standard leach field design. The General Plan states that a mound leach field system had to be installed in 1984 for the ranger residence in another area of the park, to alleviate the problem of ineffective leaching during the wet winter months. Implementation of Mitigation Measure GEO-3 would reduce any potential impacts to a less than significant level.

# MITIGATION MEASURE GEO-3 SEPTIC SYSTEM

- A soil classification and percolation test would be conducted in the proposed leach field area(s) to determine the soil texture and percolation rate, prior to approval of the final design and location. The design of the leach field would accommodate test results, in compliance with Sonoma County and/or the design and permitting requirements of Sonoma County and/or the RWQCB.
- If soils do not permit installation of a leach field system, connection to the City of Petaluma sewer system or other county-approved wastewater disposal method would be implemented prior to occupying the structures.

f) No known unique paleontological resources or geologic features are present at the project site. However, the Petaluma Formation, that underlies the site, has yielded both invertebrate (marine and freshwater) and vertebrate fossils, including horses, camels, and birds (Allen, 2003). Ground-disrupting activities could inadvertently expose and significantly impact previously unrecorded paleontological resources. Implementation of Mitigation Measure GEO-4 would reduce any potential impacts to a less than significant level.

# MITIGATION MEASURE GEO-4 PALEONTOLOGICAL RESOURCES

- In the event of an unanticipated discovery of fossils or fossil indicators during construction, excavations in the immediate area of the find would be temporarily halted or diverted until identification and proper treatment are determined and implemented by a DPR-qualified geologist or paleontologist.
- Once any significant paleontological resources are found in a project location, a qualified geologist or archaeologist/paleontologist would monitor any grounddisturbing work in that area from that point forward.

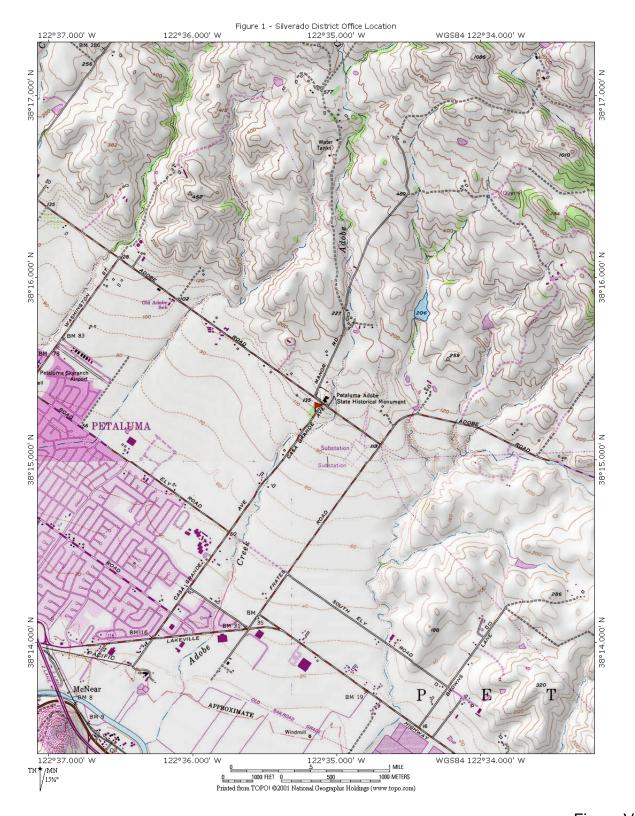


Figure VI-1

Petaluma Adobe State Historical Monumen Proposed Office Location 38°15,000' N 38°15,000' N ubstation WGS84 122°35.000' W /MN 1000 FEET '15%° Printed from TOPO! @2001 National Geographic Holdings

Figure 2- Silverado District Office Location WGS84 122°35.000' W

Figure 2 - Petaluma Adobe State Historic Park Location and Location of Proposed New District Office

Figure VI-2

# Figure VI-3

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#### VII. HAZARDS AND HAZARDOUS MATERIALS.

#### **ENVIRONMENTAL SETTING**

The proposed project site, within the boundaries of Petaluma Adobe SHP, is part of a larger area used for farming (primarily grazing) since the mid-1800s. There is no evidence of industrial use, except as related to agricultural activities, or construction of buildings on the parcel that could have been a source of hazardous materials. There is no known hazardous contamination and the site is not suspected of containing any hazardous wastes, debris, or soil contamination. The site is not on or adjacent to a source of or routine transportation route for hazardous materials. The property has lain fallow since its acquisition by California State Parks.

The eucalyptus trees on the property are an invasive non-native species that is highly flammable; limb fall from the older trees (the grove was initially planted in 1877) presents an ongoing threat to public safety. Up to two-thirds of the existing eucalyptus grove would be removed as part of this project. The grove currently covers approximately two-thirds of the 5.81-acre parcel.

Petaluma Municipal Airport is a general aviation field that is located one mile northeast of the City of Petaluma and is available for public use. The project site is within the landing pattern for the airport and is approximately 1350 feet east-southeast from the south end of Runway 11/29; there is only one runway (3600 feet long X 75 feet wide). The eucalyptus grove on the project site is used as a reporting point on the crosswind leg to final and is noted on navigation charts as an obstruction: 50 foot trees, 1340 ft. from runway, 150 ft. left of centerline, requiring 22:1 slope to clear. There are no runway end identifier lights, but runway edge lights are available, on request, from dusk to dawn. Aircraft operations average 137 per day, primarily general aviation, single-engine airplanes. Aircraft pass over the proposed project site on final approach at or below 900 feet above ground level (agl). The project site is located outside the 60 decibel (dB) Community Noise Exposure Level (CNEL) contour.

The Pacific Gas and Electric (PG&E) Lakeville Substation is located on the corner of Adobe Road and Frates Road, approximately 1000-1500 feet south-southwest of the proposed project site. The site contains a remotely-controlled facility, with three 230/115 kV transmission transformer banks, an 80 MVA 115/12 kV distribution transformer bank and related electrical equipment; a PG&E construction service yard; office; warehouse facilities; and a retention pond. A six-foot high security fence surrounds the facilities. Security lighting and transmission towers are visible at the project site. A single PG&E utility easement, 50 feet in width, traverses the project site and marks the location of two underground transmission-pressure gas lines. Restrictions on the construction of buildings and other structures, drilling or operation of wells, construction of reservoirs or other obstructions, and diminishing or substantially adding to the ground cover over the pipelines are present within the easement area. (Sonoma County Recorder, Book 271, page 93, and Book 1785, page 702).

There are five schools within a two-mile radius of the project: Casa Grande High, McDowell Elementary, La Tercera Elementary, Miwok Valley Elementary, and Old Adobe Elementary School. None of the schools are within one-quarter mile of the proposed project site.

Wou	I D THE DDO JECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	<u>NO</u> IMPACT
	Create a significant hazard to the public or the environment through the routine transport, use, or		$\boxtimes$		
b)	disposal of hazardous materials?  Create a significant hazard to the public or the environment through reasonably foreseeable upse and/or accident conditions involving the release of hazardous materials, substances, or waste into the environment?	f			
c)	Emit hazardous emissions or handle hazardous o acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	_			
d)	Be located on a site which is included on a list of hazardous materials sites, compiled pursuant to Government Code §65962.5, and, as a result, cre a significant hazard to the public or environment?	ate			
e)	Be located within an airport land use plan or, when such a plan has not been adopted, within two miles of a public airport or public use airport? If so, wou the project result in a safety hazard for people residing or working in the project area?	es .			
f)	Be located in the vicinity of a private airstrip? If so would the project result in a safety hazard for peopresiding or working in the project area?				
g)	Impair implementation of or physically interfere wir an adopted emergency response plan or emerger evacuation plan?				
h)	Expose people or structures to a significant risk of loss, injury, or death from wildland fires, including areas where wildlands are adjacent to urbanized or where residences are intermixed with wildlands	areas			

# DISCUSSION

a) Construction activities would require the use of certain potentially hazardous materials, such as fuels, oils, and solvents. These materials are generally used for heavy equipment, generators, and vehicles and would be contained within vessels engineered for safe

storage. Large quantities of these materials would not be stored at or transported to the construction site. Spills, upsets, or other construction-related accidents could result in a release of fuel or other hazardous substances into the environment. The following mitigations would reduce the potential for adverse impacts from these incidents to a less than significant level.

# **MITIGATION MEASURE HAZMAT-1**

- All equipment would be inspected for leaks immediately prior to the start of construction, and regularly inspected thereafter until equipment is removed from park premises.
- The contractor(s) and/or DPR construction crew would prepare an emergency spill response plan prior to the start of construction and maintain a spill kit on-site throughout the life of the project. This plan would include a map that delineates construction staging areas, where refueling, lubrication, and maintenance of equipment may occur. In the event of any spill or release of any chemical in any physical form at the project site or within the boundaries of Petaluma Adobe SHP during construction, the contractor would immediately notify the appropriate DPR staff (e.g., project manager, supervisor, or State Representative).
- Equipment would be cleaned and repaired (other than emergency repairs) outside
  the park boundaries. All contaminated water, sludge, spill residue, or other
  hazardous compounds would be disposed of outside park boundaries, at a lawfully
  permitted or authorized destination.
- b) See Discussion VII(a) above. In addition, two underground transmission-pressure gas lines cross portions of the project site and remainder of the parcel. Proposed construction on this site includes excavation for a septic tank and leach field, structural foundations, and utilities. Damage to these gas lines or construction of structures that would interfere with normal operation, maintenance, or emergency access could result in a potentially significant impact. If any activities would occur within or immediately adjacent to these gas line easements, the following mitigations, combined with Mitigation Measure HAZMAT-1 above, would reduce the potential for adverse impacts to a less than significant level

# MITIGATION MEASURE HAZMAT-2 UNDERGROUND GAS LINES

- All structures and facilities constructed within the easement boundaries would conform to restrictions expressed in the deeded easement (Sonoma County Recorder, Book 271, page 93 and Book 1785, page 702) and any Memorandum of Agreement or Understanding between California State Parks and PG&E.
- Prior to finalizing site layout, DPR would submit development plans for areas within or immediately adjacent to the easement to PG&E Land Services for review regarding potential conflicts with their facilities.

# MITIGATION MEASURE HAZMAT-2 (CONT.) UNDERGROUND GAS LINES

- Prior to the start of construction, DPR or State's contractor would contact PG&E
   Underground Services Alert (1-800-227-2600) to have lines located and marked
   prior to any excavation in the vicinity. PG&E's Gas Maintenance and Construction
   Supervisor would be notified at least three working days before any activities in the
   vicinity of the lines to arrange for an inspector to be present.
- c) As noted in the Environmental Setting, there are five schools in the general vicinity of the project; however, none are within one-quarter mile of the proposed project site. In addition, while the fuels, oils, and solvents, along with equipment emissions, are considered hazardous and have a certain level of toxicity, their use in the proposed setting would not have the potential to significantly impact any school. Less than significant impact.
- d) No part of Petaluma Adobe SHP, including the project site, is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5. No area within the project site is currently restricted or known to have hazardous materials present. Therefore, no impact would occur with project development.
- e) As noted in the Environmental Setting above, the proposed project site is within two miles of the Petaluma Municipal Airport, and immediately adjacent to the final approach pattern. Aircraft would pass above or near the proposed buildings at or below 900 feet msl (airport elevation is 87 feet msl). However, the maximum exterior height of the buildings would not exceed 20 feet above ground level (agl) and would have no antennas or other structures exceeding that height at buildout. A crane may be needed to position construction materials, but the height would not exceed 50 feet. Per FAR Part 77, Subpart B & C, the height of these structures would not present a hazard to navigation. Less than significant impact.

Work lights, if necessary, at the project site during construction would be shielded and their use would be coordinated with the airport management to avoid impacts to operations. Nothing in the construction process would present a hazard to aircraft in the pattern or overflight. Normal operational lighting would be no brighter than existing residential outdoor lighting and considerably dimmer than existing exterior security lighting at the PG&E Lakeville Substation, just southeast of the project site. Less than significant impact.

Construction of any occupied structure within an airport use area carries with it increased risk. However, the project site is outside the "Clear Zone", identified by the Federal Aviation Administration (FAA) as the highest risk area for aircraft in flight and people on the ground, due to aircraft accidents. It is also approximately 100 feet off the primary glide path for landing and departing aircraft. Less than significant impact.

f) The proposed project site is not located in the vicinity of a private airstrip. No impact.

- g) Most construction activities associated with the proposed project would occur within the boundaries of Petaluma Adobe SHP and work would not restrict access to, cause delays, or block any public road outside the immediate construction area. Minor delays may occur along Casa Grande Road during delivery of construction materials and structural components, and during construction of the encroachment. However, minimum access requirements for emergency vehicles would be maintained at all times. Casa Grande Road is not a designated emergency evacuation route. Therefore, the impact of this project would be less than significant.
- h) The proposed project site is located in an area with significant amounts of grasses and a grove of eucalyptus trees that become highly flammable during the dry season (June-October). Although the immediate construction area would be cleared of vegetation, including the eucalyptus trees, dry grasses and trees would still remain along the perimeter of the job site. Heavy equipment can get very hot with extended use; this equipment would sometimes be in close proximity to this vegetation. Improperly outfitted exhaust systems or friction between metal parts and/or rocks could generate sparks, resulting in a fire. Implementation of Mitigation Measure HAZMAT-3 below, in conjunction with Mitigation Measure HAZMAT-1 and 2 above, would reduce the potential for adverse construction impacts from this project to a less than significant level.

# MITIGATION MEASURE HAZMAT- 3 CONSTRUCTION FIRE MANAGEMENT

- A fire safety plan would be developed and implemented; constraints would be included in all contracts and reviewed by all project staff prior to the start of any work.
   Job site characteristics to reduce the potential for fire would be included.
- Spark arrestors or turbo-charging (which eliminates sparks in exhaust) and fire extinguishers would be required for all heavy equipment.
- Construction crews would be required to park vehicles away from flammable material, such as dry grass or brush. At the end of each workday, heavy equipment would be parked over mineral soil, asphalt, or concrete to reduce the chance of fire.
- Park staff would be required to have a State Park radio on site, which allows direct contact to California Department of Forestry and Fire Protection (CDF) and centralized dispatch center, to facilitate the rapid dispatch of control crews and equipment in case of a fire. Fire suppression equipment would also be available on park grounds.

The office complex proposed in this project would be located in a rural area, surrounding by fields of seasonally dry grasses. A grove of highly flammable eucalyptus trees would remain to the northeast of the site. Although the area is not considered to have high or very high potential for large wildland fires (SCGP, Fig. PS-1h), the potential for localized grass fires is still substantial, which could present a significant risk to people or structures in the area. However, Mitigation Measure HAZMAT-4 would reduce these impacts to a less than significant level.

# MITIGATION MEASURE HAZMAT- 4 OPERATIONAL FIRE MANAGEMENT

- Areas surrounding any structures would be cleared of flammable materials and eucalyptus trees to a minimum distance of 30 feet, in compliance with the California Fire Plan, Pre-Fire Management guidelines. A Defensible Space Vegetation Management Plan would be prepared and implemented in compliance with County of Sonoma Department of Emergency Services (Fire Services) requirements.
- Flammability and drought tolerance would be considered a priority when selecting native plant materials used for revegetation and landscaping. Final selections and landscaping design would be subject to District resource ecologist review and approval.
- A fire suppression system would be installed in all structures, including fire sprinklers, as required by the Sonoma County Fire Sprinkler Ordinance (effective May 27, 2003); California Building Code Standards 9-1, 9-2, and 9-3; and the State Fire Marshall, and in accordance with the County of Sonoma Department of Emergency Services commercial fire sprinkler installation guidelines. If the existing well is used to supply water for fire suppression, a holding tank, pressure tank system, and fire pump system would be installed, as necessary, to achieve adequate pressure and provide a sufficient volume of water. System would be approved and operational prior to occupancy.

# VIII. HYDROLOGY AND WATER QUALITY.

# **ENVIRONMENTAL SETTING**

# Watershed

The proposed new district office project site is located to the north of Adobe Creek (see Figure VIII-1) in the Petaluma River Watershed. Adobe Creek and the Petaluma River are located in the San Pablo Hydrologic Basin, as defined by the San Francisco Bay Regional Water Quality Control Board's (SFBRWQCB) Basin Plan (1995). Degradation of the Adobe Creek watershed has occurred over time due to land use practices (grazing, loss of riparian vegetation). Accelerated bank erosion and gullying occur along the portion of Adobe Creek that is within the park. Portions of the Adobe Creek watershed have been restored; the United Anglers of Casa Grande High School have planted trees to improve habitat and built a fish hatchery for Chinook salmon (Cooke, 2001).

# **Flooding**

The project area is outside the limits of the 100-year flood zone, as determined by the Federal Emergency Management Agency (FEMA) (see Figure VIII-A).

# Water Quality & Water Supply

Water quality in the San Francisco Bay Area is regulated by the SFBRWQCB. The Basin Plan does not list beneficial uses for Adobe Creek, but the beneficial uses for the Petaluma River apply to its tributaries. Habitat-related uses that may apply to Adobe Creek include cold freshwater habitat, fish migration, preservation of rare and endangered species, fish spawning, warm freshwater habitat, and wildlife habitat. Adobe Creek is listed as Significant Surface Waters in the SFBRWQCB Basin Plan (San Pablo Basin, Fig. 2-8).

Groundwater for the Petaluma Adobe is supplied from an on-site, aquifer-fed well. The well has a yield of approximately 60 gallons/minute (Komar, 2003). There is no holding tank for water storage; water is supplied on demand directly from the well. No details on the construction of the well are available.

		POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
Wou	LD THE PROJECT:				
a)	Violate any water quality standards or waste discharge requirements?				
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharg such that there would be a net deficit in aquifer volume or a lowering of the local groundwater to level (e.g., the production rate of pre-existing netwells would drop to a level that would not suppose existing land uses or planned uses for which perhave been granted)?	able earby ort			

		SIGNI	NTIALLY FICANT PACT	SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
c)	Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, in a manner which would result in substantial on- or off-site erosion or siltation?					
d)	Substantially alter the existing drainage pattern of site or area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in on- or off-site flooding?	ase				
e)	Create or contribute runoff water which would ex the capacity of existing or planned stormwater drainage systems or provide substantial addition sources of polluted runoff?					
f)	Substantially degrade water quality?			$\boxtimes$		
g)	Place housing within a 100-year flood hazard are as mapped on a federal Flood Hazard Boundary Flood Insurance Rate Map, or other flood hazard delineation map?	or				
h)	Place structures that would impede or redirect flo flows within a 100-year flood hazard area?	boc				
i)	Expose people or structures to a significant risk loss, injury, or death from flooding, including flooresulting from the failure of a levee or dam?					
j)	Result in inundation by seiche, tsunami, or mudf	low?		$\boxtimes$		

LEGO TUAN

# DISCUSSION

a) During grading and excavation to construct the building foundations, parking lot, and utility trenches, a release of sediment to Adobe Creek could occur, although the project site is not directly adjacent to Adobe Creek. Other potential impacts to water quality could result from releases of fuels or other fluids from vehicles and equipment during the construction process. [See Discussion VII(a) above.] This could result in a violation of water quality standards and waste discharge requirements. The following mitigation measures, combined with GEO-2 and HAZMAT-1 would reduce any potential impacts to a less than significant level.

# MITIGATION MEASURE HYDRO-1 WATER QUALITY

 The project would be in compliance with all applicable water quality standards and waste discharge requirements as specified in the SFBRWQCB Basin Plan. b) Water for Petaluma Adobe SHP is currently provided from an existing well, located to the east of the Petaluma Adobe. The aquifer that feeds this well also regulates the local water table that supports Adobe Creek and the surrounding habitat [see Discussion IV(a)(iii)]. Depending on the actual amount and pattern of usage, the increased demand could result in reduced aquifer water levels and potentially significant impacts to sensitive fish and other aquatic and riparian species in the creek. Implementation of Mitigation Measure HYDRO-2 below would reduce these potential impacts to a less than significant level.

# MITIGATION MEASURE HYDRO-2 WATER SUPPLY

- If the existing well is being considered as the primary water source, testing would be conducted to determine the total amount of water and rate of delivery necessary to adequately supply human needs, irrigation, and fire suppression during normal operations of the new office(s). Tests would be based on actual or comparable usage and regulatory requirements. These results would then be compared to the amount of water currently being supplied by the well to determine the changes in amount and pattern of use. Well construction and production values would be determined, specifically the depth of the well and the aquifer(s) screened. An aquifer test should be performed to determine aquifer characteristics and calculate the cone of depression for the well, to determine if the drawdown could impact Adobe Creek. Data on aquifer characteristics from other agency sources would be used, when available, to approximate the amount of drawdown.
- If test results indicate operations could result in sufficient drawdown to potentially
  impact groundwater recharge, with an associated lowering of the local groundwater
  table level, or insufficient capacity for a dependable water supply [see Discussion
  XVI(d)], connection to an alternative water source, such as the existing Petaluma
  City water supply line that runs along Adobe Road, or construction of appropriate
  water storage facilities to support the increased usage would be implemented prior
  to occupancy.
- c) The proposed project includes construction of an asphalt concrete parking lot, of approximately 20,000 ft<sup>2</sup>; an additional 700 ft<sup>2</sup> of walkways; and driveway encroachment onto Casa Grande Road. The existing drainage pattern would be altered to some degree during the project, which could increase on- or off-site erosion or siltation. Grading and flattening of the sloped areas would redirect runoff. Stream courses (Adobe Creek) would not be altered as part of this project. Implementation of Mitigation Measure Geo-2, HYDRO-3, and HYDRO-4 would reduce the potential impacts to a less than significant level.
- d) See Discussion VII(c) above. Alteration of the existing drainage patterns and an increase in surface area, due to the construction of buildings and impervious surfaces, could increase the rate or amount of surface runoff in a manner that could result in on- or off-site flooding. The total increase in surface area would be approximately 28,320 ft<sup>2</sup>. Implementation of Mitigation Measure Geo-2, HYDRO-3, and HYDRO-4 would reduce any potential impacts to a less than significant level.

# MITIGATION MEASURE HYDRO-3 FLOODING

- A site-specific and appropriated sized stormwater drainage system would be designed and installed, in compliance with the SFBRWQCB and National Pollutant Discharge Elimination System (NPDES) Permitting Program requirements and guidelines.
- e) This project should not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems, provided a properly designed stormwater system is designed and constructed (no stormwater drainage system currently exists at this location). No substantial additional sources of polluted runoff are expected from this project, provided a spill prevention plan is in place. Implementation of Mitigation Measures GEO-2, HAZMAT-1, HYDRO-3, and HYDRO-4 would reduce these potential impacts to a less than significant level.
- f) The proposed project includes excavation and other activities that could result in increased soil erosion, siltation, and runoff. There is also the potential for the accidental spillage of hazardous materials, such as fuel or other vehicle or equipment fluids. Although Adobe Creek is greater than 100 meters from the closest portion of the project area, the potential still exists for degradation of the water quality in the creek as a result of these project activities. However, implementation of GEO-2, HAZMAT-1, and HYDRO-3 would reduce this potential to less than significant.
- g,h) This project does not include housing, only office and warehouse space, and is not located within the 100-year floodplain of Adobe Creek (FEMA, 2003) or a 100-year flood hazard area (see Fig. VII-A). Therefore, there is no potential for impact from this project.
- i) There are no nearby dams or levees that could fail and cause flooding in the project area. Therefore, placement or occupancy of the proposed structures is irrelevant. No impact.
- j) The proposed project site is not located adjacent to an ocean or large body of water. It also is not included in the areas delineated as subject to potential inundation by tsunamis in the Sonoma County GP (Fig. PS-1h). Therefore, the project would not increase the risk of inundation by seiche or tsunami.

Mudflows, while prevalent in Sonoma County, are not currently a concern at the project site; the site topography has a low slope of 3% to 4%. However, over-steepening of the terrain during construction could result in an increased risk of mudflow. Implementation of GEO-2 and HYDRO-3, along with HYDRO-4 below, would reduce the potential impact from mudslides to a less than significant level.

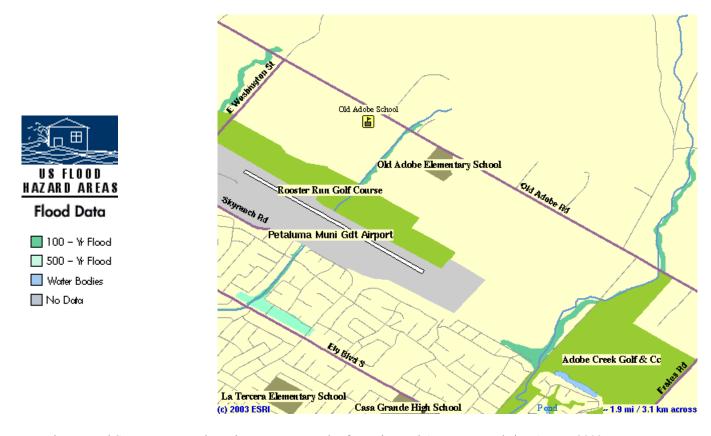
# MITIGATION MEASURE HYDRO-4 MUDFLOWS

• Site topography would remain consistent with the existing 3% - 4% slope.

# FLOOD ZONE MAP PETALUMA ADOBE STATE HISTORIC PARK



Figure VIII-A



Source: Environmental Systems Research Institute, Inc., Hazard Information and Awareness website; August 2003. http://mapserver2.esri.com/cgi-bin/hazard.adol?z=c&c=-122.603556%2C38.259137&p=1&d=0&s=0&cd=p&Map.x=252&Map.y=159 This page left intentionally blank.

# IX. LAND USE AND PLANNING.

#### **ENVIRONMENTAL SETTING**

The proposed project location is within the boundaries of the Petaluma Adobe SHP, which is zoned as a Public Facilities District (PF) in the Sonoma County GP. Properties with this zoning are considered sites that serve the community or public need and this status is intended to protect the property from encroachment of incompatible uses. This zoning is consistent with DPR's classification of the property surrounding the historic Petaluma Adobe as a State Historic Park. Historical units are established primarily to preserve objects of historical, archaeological, and scientific interest, archaeological sites, and places commemorating important persons or historic events (PRC 5019.59).

Both the parcel immediately across Casa Grande Road (to the east south-east) and the PG&E Lakeville Substation, further to the east, are also zoned PF, with the Adobe Creek Golf Course separating the two parcels. The parcel containing the Adobe Creek Golf Course is zoned as a Recreation and Visitor-Serving Commercial District (K) to accommodate the golf course development.

Adjoining properties to the north, northeast, and west of the site are zoned as a Diverse Agriculture (B6) and Land Extensive Agriculture (B6) Districts, where small acreage intensive farming and part-time farming activities dominate, but where other diverse activities are allowed with a use permit. Current use includes grazing, vineyards, cultivation of row crops, and rural residential housing. Petaluma Municipal Airport is a general aviation field that is located approximately one-quarter mile northwest of the project site.

The proposed project site is located at the southeastern end of an L-shaped parcel (Sonoma County Assessor's Parcel #17-140-01), approximately 5.81 acres in size. The property is situated across from the historic Petaluma Adobe, at the intersection of Old Adobe and Casa Grande Roads. The Petaluma Adobe SHP GP originally envisioned construction of a Visitor Center, offices, park entrance, and day use area (picnic and parking) on and adjacent to the proposed project site. Although it appears that development of a Visitor Center and relocation of the park entrance and visitor facilities to this site is unlikely, use of the site for office space is consistent with the remaining portion of the GP's development concept for this parcel. Currently, the parcel is only used intermittently for special events. There are no permanent structures or facilities on the parcel.

A single rural residence, with a number of outbuildings, is immediately adjacent to the parcel's southern boundary. Casa Grande Road borders the parcel to the east, Adobe Road to the north, and agricultural farmland to the north and west. The property is outside the Petaluma City limits.

		POTENTIALLY SIGNIFICANT IMPACT	SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
V	VOULD THE PROJECT:				
	a) Physically divide an established community?				$\boxtimes$
	b) Conflict with the applicable land use plan, policy, or regulation of any agency with jurisdiction over the project (including, but not limited to, a genera plan, specific plan, local coastal program, or zoni ordinance) adopted for the purpose of avoiding o mitigating an environmental effect?	ıl ing			
	c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				

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#### DISCUSSION

- a) The proposed project site is wholly within the boundaries of Petaluma Adobe SHP, in rural Sonoma County. It is approximately one mile outside the Petaluma City limits. The parcel does not contain or define an established community and no project activities would disrupt or divide any community functions. Project activities or operations following construction would not impede access to any adjacent parcels. No impact.
- b,c) No project elements are in conflict with the zoning, regulatory policies, land use plans, or conservation plans for this area. The area has been designated as Valley Oak Habitat by Sonoma County, but no Valley Oaks exist on the property or would be harmed by the project. Although the proposed project site is within the area of operations for the Petaluma Municipal Airport, the structures and activities proposed for this location are not in conflict with the airport Master Plan and, per FAR 77, pose no threat to navigation. No impact.

# X. MINERALS

#### **ENVIRONMENTAL SETTING**

No significant mineral resources have been identified within the boundaries of the project area at the Petaluma Adobe SHP. Mineral resource extraction is not permitted under DPR Resource Management Directives. The project area is not designated part of an Aggregate Resource Area, as identified in the Aggregate Resources Management Plan (SCGP, Mineral Resources).

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	<u>NO</u> IMPACT
Would the project:				
a) Result in the loss of availability of a known mineral resource that is or would be of value the region and the residents of the state?	to			
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific pl or other land use plan?	□ lan,			

# **DISCUSSION**

- a) The project would not result in the loss of availability of a known mineral resource because no known mineral resources exist within the project boundary. No impact.
- b) The project would not result in the loss of availability of a locally important mineral resource recovery site because none exist within the project boundary. No impact.

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# XI. NOISE.

#### **ENVIRONMENTAL SETTING**

The proposed project site is located within the boundaries of Petaluma Adobe SHP, on the outskirts of the City of Petaluma, in an unincorporated part of rural Sonoma County. The 5.81-acre parcel containing the project site is bounded on the northeast by Old Adobe Road (approximately 500 feet from the project site) and on the east-southeast by Casa Grande Road, both two-lane, county-maintained roadways. Traffic noise from Old Adobe Road is consistent with its LOS-D rating; traffic includes heavy trucks and buses. Casa Grande Road has low levels of intermittent traffic (equivalent to LOS-A). Sources of noise from properties immediately surrounding the project site to the west and north consists primarily of farm equipment, livestock, and residential activities. The only sources of significant noise in the vicinity of the project (SCGP, Fig. NE-1) are the traffic on Old Adobe Road and the Petaluma Municipal Airport.

Petaluma Municipal Airport is a general aviation field that is located one mile northeast of the City of Petaluma and is available for public use. The project site is within the landing pattern for the airport and is approximately 1350 feet east-southeast from the south end of Runway 11/29. Aircraft operations average 137 per day, primarily general aviation, single-engine airplanes. Aircraft pass over the proposed project site on final approach at or below 900 feet above ground level (agl). The project site is located outside the 60 decibel (dB) Community Noise Exposure Level (CNEL) contour.

The Pacific Gas and Electric (PG&E) Lakeville Substation is located on the corner of Adobe Road and Frates Road, approximately 1000-1500 feet south-southwest of the proposed project site. The site contains a remotely-controlled facility, with three 230/115 kV transmission transformer banks, an 80 MVA 115/12 kV distribution transformer bank and related electrical equipment; a PG&E construction service yard; office; warehouse facilities; and a retention pond.

		POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	<u>NO</u> IMPACT
Wοι	JLD THE PROJECT:				
a)	Generate or expose people to noise levels in exc of standards established in a local general plan o noise ordinance, or in other applicable local, state or federal standards?	r			
b)	Generate or expose people to excessive grounds vibrations or groundborne noise levels?	oorne 🗌			
c)	Create a substantial permanent increase in ambienoise levels in the vicinity of the project (above levels without the project)?	ent 🗌			
d)	Create a substantial temporary or periodic increa in ambient noise levels in the vicinity of the project in excess of noise levels existing without the project?				

		POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
•	e) Be located within an airport land use plan or, wher such a plan has not been adopted, within two mile of a public airport or public use airport? If so, would the project expose people residing or working in the project area to excessive noise levels?	es			
1	f) Be in the vicinity of a private airstrip? If so, would project expose people residing or working in the project area to excessive noise levels?	the			

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# **DISCUSSION**

a) Heavy equipment, including excavators and bulldozers, along with vehicle and delivery traffic, would operate throughout the construction phase of the project. Construction noise levels at and near the project area would fluctuate, depending on the type and number of construction equipment operating at any given time. There are several residences in the vicinity of the project site that could be substantially affected by the proposed construction-related activities. Depending on the specific construction activities being performed, short-term increases in ambient noise levels could result in speech interference near the project site and annoyance to neighbors or visitors to the Adobe. As a result, construction-generated noise would be considered to have a potentially significant short-term impact to nearby noise-sensitive receptors. Implementation of the following mitigation measures would reduce those potential impacts to a less than significant level.

# **MITIGATION MEASURE NOISE 1**

- Construction activities would generally be limited to daylight hours, between 7 am and 7 pm. Work on weekends and holidays would not begin prior to 8 am.
- Internal combustion engines used for any purpose at the job site would be
  equipped with a muffler of a type recommended by the manufacturer. Equipment
  and trucks used for construction would utilize the best available noise control
  techniques (e.g., engine enclosures, acoustically-attenuating shields or shrouds,
  intake silencers, ducts, etc.) whenever feasible and necessary.
- Stationary noise sources and staging areas would be located as far from sensitive receptors as possible. If they must be located near sensitive receptors, stationary noise sources would be muffled to the extent feasible and/or, where practicable, enclosed within temporary sheds.

Once the office is operational, employees and visitors to the office will be subject to noise from aircraft overflights and traffic noise, primarily from Adobe Road. Aircraft noise near airports typically consists of brief, noisy events separated by periods of relative quiet. As noted in Discussion XI(e) below, the project site is outside the projected 60 dB CNEL noise contour for the airport. Noise impacts outside the contour are not considered to be

significant (SCGP, Part 9, Section 4). Traffic on Adobe Road is considered a significant source of noise (SCGP, Part 11, Section 4 and Fig. NE-1); however, the site is over 500 feet from the roadway and the remaining grove of eucalyptus will help to reduce overall noise. The structures will also contain noise-reducing insulation. Less than significant impact.

- b) Construction activity would not involve the use of explosives, pile driving, or other intensive construction techniques that could generate significant ground vibration or noise. Minor vibration immediately adjacent to excavating equipment would only be generated on a short-term basis. Therefore, groundborne vibration or noise generated by the project would have a less than significant impact.
- c) Once the proposed project is completed, all related construction noise would disappear. Nothing within the scope of the proposed project would result in a substantial permanent increase in ambient noise levels. The proposed buildings would be used for administrative activities and warehouse storage, neither of which would generate noise levels in excess of ambient levels associated with normal daily operations in the surrounding community. Therefore, no significant impact to permanent ambient noise levels would be anticipated.
- d) See Discussion XI(a, c) above. Mitigated to a less than significant impact.
- e) As noted in the Environmental Setting above, the proposed project site is within two miles of the Petaluma Municipal Airport, and immediately adjacent to the final approach pattern. Aircraft would pass above or near the proposed buildings at or below 900 feet msl (airport elevation is 87 feet msl). The Sonoma County Airport Land Use Commission (ALUC) has established a noise/land use compatibility matrix which identifies the acceptable range of noise levels for various types of land use. Generally, under ALUC policies, new residential land uses (or other uses within a primarily rural residential area) are acceptable if exterior noise levels are at or below 60 dB CNEL. The project location is outside the projected 60 dB CNEL noise contour (at airport capacity) for the Petaluma Municipal Airport. (SCGP, Fig. AT-8). Therefore, noise impacts to those using the new facilities would be less than significant.
- f) The proposed project site is not located in the vicinity of a private airstrip. No impact.

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# XII. POPULATION AND HOUSING

#### **ENVIRONMENTAL SETTING**

Petaluma Adobe SHP is one of California's historic parks, located in a rural residential area east of the City of Petaluma. Housing within the park boundaries is limited and restricted to park staff residences. As a historic and recreational facility, the development of permanent housing is not a planned use of the park. The park is both a local recreational resource and a destination park, used by locals and out-of-town visitors alike, but does not offer business or residential opportunities within its boundaries.

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
WOULD THE PROJECT:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				
<ul> <li>b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?</li> </ul>				
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				

# **DISCUSSION**

- a) Work proposed by this project would provide office space for current DPR employees; additional positions, if any, would be minimal. The project would not have a housing component and all work would take place within the confines of the park boundaries. There would be no additions or changes to the existing local infrastructure, other than a single encroachment access onto an existing county road and extension of existing utilities. Although this project resulted from consolidating several locations, most employees already reside within commuting distance of the new facility and are not expected to relocate. No new public or private projects are anticipated to be initiated as a result of construction and operation of the office. Therefore, it would have a less than significant impact on population growth in the area.
- b) As noted in XII(a) Discussion above, the project would have no housing component and would neither modify or displace any existing housing. No houses would have to be moved or removed for the project. The appearance of the finished structures would be compatible with nearby buildings and residences, and the presence of the office is not likely to indirectly cause those residences to be sold or abandoned. No impact.
- c) As noted in XII(a) Discussion above, the project would have no housing component and would displace no one, either temporarily or permanently. No impact.

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# XIII. PUBLIC SERVICES.

#### **ENVIRONMENTAL SETTING**

Petaluma Adobe SHP is located approximately one mile east of Petaluma, in an unincorporated area of Sonoma County. Emergency access to the project site is along county paved and maintained roads.

A State Park Ranger (housed at the park) provides immediate police protection within the park boundaries, with backup provided by the Sonoma County Sheriff's Department and supported, as needed, by the Petaluma City Police Department. The Sonoma Valley Sheriff's Department Substation serves the project area from its location in Boyes Hot Springs. A helicopter, based at Charles Schultz (Sonoma County) Airport in Santa Rosa, is available for medical emergencies, search and rescue, and fire support, and operates 24 hours a day, 7 days a week.

Fire protection is provided by the California Department of Forestry and Fire Protection (CDF), supported by the Petaluma Fire Department and the County of Sonoma Department of Emergency Services Fire Division (County Service Area #40). The CDF Petaluma Fire Station is approximately six miles from the project site. However, due to the close proximity of two Petaluma Fire Department Substations (within three miles of the project area), they would probably be the first responder to any emergency. CDF also maintains an Air Attack Base at the Charles Schultz (Sonoma County) Airport in Santa Rosa (approximately 25 miles and 5-7 minutes flight time away). The CDF Helitack Base is located in Cobb, about 65 miles to the north of Petaluma.

Petaluma Adobe SHP is located within the Old Adobe Union School District and adjacent to the Petaluma School District (Casa Grande High). There are five schools within a two-mile radius of the project: Casa Grande High, McDowell Elementary, La Tercera Elementary, Miwok Valley Elementary, and Old Adobe Elementary School. None of the schools are within one-quarter mile of the proposed project site.

The adobe ranch building at Petaluma Adobe SHP was the main residence of Rancho Petaluma, the 66,000-acre agricultural empire of General Mariano Guadalupe Vallejo and was the center of one of the most prosperous private estates of the Mexican period (1834-1846). The adobe and grounds are available to visitors and the park has shaded picnic areas. There are no overnight accommodations. There are no other public parks in the immediate vicinity of the project, although two golf courses are within a mile of the property and six community parks and recreation facilities are with a two-mile radius. The proposed project area is within the boundaries of Petaluma Adobe SHP, but not within the visitor area or historic core. Petaluma Adobe SHP, including the parcel containing the proposed project site, is owned and operated by California State Parks.

WOULD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a) Result in significant environmental impacts from construction associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?				
Police protection?			$\boxtimes$	
Schools?			$\boxtimes$	
Parks?				$\boxtimes$
Other public facilities?			$\boxtimes$	

#### DISCUSSION

a) The project proposes to construct buildings to provide office and warehouse space for the Diablo Vista State Park District. Alteration of District boundaries and consolidation of responsibilities resulted in the need for a larger, more centralized administrative headquarters. Approximately 35 employees would use the facilities on a daily basis (Monday - Friday). Because most employees already reside in Sonoma County, relocation to the areas immediately adjacent to the project site is expected to be negligible.

Use of construction equipment around flammable annual vegetation presents an increased fire risk that could result in additional demands on CDF and local fire response teams. Any impact on services would be temporary and nothing in the project scope would contribute to the need for an increase in the existing level of public service. Implementation of Mitigation Measures HAZMAT 3-4, combined with the availability of on-site fire suppression equipment and support from State Park Rangers, would reduce the potential impact to Fire Protection services to a less than significant level.

State Park Rangers with law enforcement authority patrol the park boundaries, police public use of the picnic areas and the Adobe grounds, enforce the public resource code, and guard against misuse of park property and resources. This includes the parcel containing the proposed project site. The Sonoma County Sheriff's Department responds to emergency calls and assists with criminal investigations. The presence of an administrative headquarters office at the park is not expected to result in any need for increased police services.

Although five schools (one high school and four elementary schools) exist within two miles of the project area, increased school enrollment is expected to be minimal. As noted above, most employees are expected to remain at their current residence and commute to work. Children would, in most cases, continue to attend school in their home district. No changes would occur that would require additional schools or school personnel. Less than significant impact.

None of the project elements, during construction or operation of the facilities, would interrupt normal activities at Petaluma Adobe SHP or contribute to an increase of visitation. The level of required services within the park is expected to remain relatively static, subject only to annual fluctuations in visitor use. No impact.

County administrative requirements would be equivalent to any other minor commercial construction project and most operational requirements would be duplicative of those already performed at the previous headquarters location in Sonoma. The proposed project would have no significant impact on other public services.

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#### XIV. RECREATION.

#### **ENVIRONMENTAL SETTING**

The project site is located within the boundaries of Petaluma Adobe SHP. The park contains the adobe ranch building that was the main residence of Rancho Petaluma, the 66,000-acre agricultural empire of General Mariano Guadalupe Vallejo, and the center of one of the most prosperous private estates of the Mexican period (1834-1846). The Adobe and grounds are available to visitors daily and guided tours are available. The park has shaded picnic areas, with views of farmland and oak-studded hills, and is only open during daylight hours; there are no overnight accommodations. There are six community parks or recreation facilities within a two-mile radius of the project area, although none are in the immediate vicinity of the project site (except for Petaluma Adobe SHP). There are also two golf courses within a mile of the property. Although the proposed project area is within the boundaries of Petaluma Adobe SHP, it is not within the visitor area or historic core. Petaluma Adobe SHP, including the parcel containing the proposed project site, is owned and operated by California State Parks.

Would the project:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	<u>NO</u> <u>IMPACT</u>
<ul> <li>a) Increase the use of existing neighborhood and regional parks or other recreational facilities, such that substantial physical deterioration of the facility would occur or be accelerated?</li> </ul>				
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?				

#### **DISCUSSION**

- a) The proposed project site is separate from the visitor area and historic core of Petaluma Adobe SHP. Construction activities are not recreation-related and would not interfere with park accessibility or enjoyment of the visitor experience. The park would continue to receive the same level and type of use following completion of the project as it currently receives. No increase in the use of existing recreational facilities would occur as a result of this project. No impact.
- The project does not contain any recreational facilities or require the expansion of existing facilities. No impact.

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#### XV. TRANSPORTATION/TRAFFIC.

#### **ENVIRONMENTAL SETTING**

The proposed project site is located within the boundaries of Petaluma Adobe SHP, on an undeveloped parcel across Adobe Road from the Adobe and historic core. The park is approximately two miles east of Highway 101, off the Highway 116/Lakeville Highway exit. (Old) Adobe Road is the primary access road for the park and route to the project location, although the actual site access would be off Casa Grande Road. Adobe Road is a primary arterial county roadway, rated LOS-D, with daily traffic volumes projected at 17,000 by 2005 (SCGP, Fig. CT-2c). Traffic on the road is relatively constant between 6 a.m. and 8 p.m. daily, including weekends and holidays, with moderate to heavy congestion at the Adobe Road/Frates Road intersection during commute hours (approximately three-quarters of a mile from the project site).

The Adobe Road/Frates Road intersection is also a public bus stop on the principal intercity transit route for Sonoma County Transit. This intersection is the closest stop to the project site.

The proposed project location is approximately 580 feet southwest of Adobe Road, on Casa Grande Road. Casa Grande Road is a two-lane county-maintained minor collector roadway, with traffic volume equivalent to LOS-A. Minor congestion occurs Monday-Friday, during arrival and departure of students to the numerous schools in the area, including Casa Grande High School (approximately one mile south of the project site, on Casa Grande Road). School buses also use the road during these times.

The project site is within the landing pattern for Petaluma Municipal Airport and is approximately 1350 feet east-southeast from the south end of Runway 11/29. The eucalyptus grove on the project site is used as a reporting point on the crosswind leg to final and is noted on navigation charts as an obstruction: 50 foot trees, 1340 ft. from runway, 150 ft. left of centerline, requiring 22:1 slope to clear. Aircraft operations average 137 per day, primarily general aviation, single-engine airplanes. Aircraft pass over the proposed project site on final approach at or below 900 feet above ground level (agl).

Would the project:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
WOULD THE PROJECT:				
a) Cause a substantial increase in traffic, in relation to existing traffic and the capacity of the street system (i.e., a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?				
b) Exceed, individually or cumulatively, the level of service standards established by the county congestion management agency for designated roads or highways?				

	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	<u>NO</u> IMPACT
c) Cause a change in air traffic patterns, including either an increase in traffic levels or a change in location, that results in substantial safety risks?				
d) Contain a design feature (e.g., sharp curves or a dangerous intersection) or incompatible uses (e.g., farm equipment) that would substantially increase hazards?				
e) Result in inadequate emergency access?			$\boxtimes$	
f) Result in inadequate parking capacity?				$\boxtimes$
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				

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#### DISCUSSION

- a) All construction activities associated with the project would occur within the boundaries of Petaluma Adobe SHP. Only construction of the driveway encroachment or delivery of construction materials would have the potential to cause limited traffic delays on a public road (Casa Grande Road). Adobe Road would be the primary access road leading to the project site, with a turn onto Casa Grande Road to enter the project area. As noted in the Environmental Setting above, Adobe Road experiences traffic volumes of up to 17,000 vehicles daily. The addition of 10-12 additional vehicles (crew pickups, delivery trucks, and equipment haulers) making 1-2 trips daily would not constitute a substantial increase in traffic volume for this road or result in additional congestion. Minimal delays may occur when vehicles arriving from the east on Adobe Road wait to turn left onto Casa Grande Road (there is no left turn lane), but no more than with the regular daily traffic flow. In addition, work crews and equipment would typically arrive or leave the site outside the normal periods of congestion. Less than significant impact.
- b) As noted in Discussion XV(a) above, the proposed project would add approximately 24 vehicle trips daily to Adobe Road and Casa Grande Road. Adobe Road is rated LOS-D and Casa Grande Road, if rated, would be approximately LOS-A. The addition of this limited number of vehicle trips would not exceed, individually or cumulatively, the LOS standards for either roadway. No significant impact.
- c) The project proposes to construct structures to provide office and warehouse storage space for the Diablo Vista State Park District. As noted in the Environmental Setting above, the project site is within the traffic pattern for Petaluma Municipal Airport and immediately adjacent to the glide path for final approach to the airport's only runway. However, the maximum exterior height of the proposed buildings would not exceed 20 feet above ground level (agl) at buildout. A crane may be needed to position construction

materials, but the height would not exceed 50 feet. Per FAR Part 77, Subpart B & C, the height of these structures would not present a hazard to navigation. Use of temporary construction lighting would be minimal and would be coordinated with airport operations to avoid interfering with arriving and departing aircraft traffic.

The eucalyptus grove to the northeast of the project site is used as a reporting point for pilots on the crosswind leg to final and is noted on navigation charts as an obstruction: 50 foot trees, 1340 ft. from runway, 150 ft. left of centerline, requiring 22:1 slope to clear. Although a portion of this grove would be removed to clear the site for construction and to protect public safety, approximately one-third to one-half of the grove would remain following construction, maintaining the general appearance and presence of the existing stand.

Nothing in the construction process or normal operations would present a hazard to aircraft in the pattern or overflight or require temporary or permanent changes in the existing air traffic patterns. Less than significant impact.

- d) The only transportation-related design change associated with this project is the construction of a driveway encroachment from the parking lot, entering Casa Grande Road approximately 580 feet southwest of the Adobe Road intersection. With the removal of a portion of the eucalyptus grove, line of sight would be unimpeded, with sufficient distance from the intersection to support a safe merge into traffic. As noted in the Environmental Setting, traffic on Casa Grande Road is generally light, with infrequent congestion. There are no incompatible uses associated with this project. Less than significant impact.
- e) Most construction activities associated with the proposed project would occur within the boundaries of Petaluma Adobe SHP and work would not restrict access to or block any public road outside the immediate construction area. Minor delays may occur along Casa Grande Road during delivery of construction materials and structural components, and during construction of the encroachment. However, minimum access requirements for emergency vehicles would be maintained at all times. The property elevation at the project location is roughly level with the two roadways bordering it to the north and west, providing immediate access to the site for emergency vehicles, even if the construction access road or driveway is impassible. Less than significant impact.
- f) The proposed office would have a staff of approximately 35 employees. The project proposes to construct a parking lot with 50 spaces; three of the spaces would be ADAcompliant, one of which would be van-accessible. This would be sufficient to accommodate all employees, visitors, and normal fluctuations in staffing during the life of the facility. No impact.
- g) There are no policies, plans, or programs supporting alternative transportation that apply to this project. No impact.

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#### XVI. UTILITIES AND SERVICE SYSTEMS.

#### **ENVIRONMENTAL SETTING**

The proposed project site is a vacant parcel of land, located within Petaluma Adobe SHP, about one mile east of the City of Petaluma, in Sonoma County. There are no structures or current requirements for utilities or service systems at the site. Overhead electric and telephone utility lines are located along the east side of Casa Grande Road. Transmission of electric power for this area is provided by the PG&E Lakeville Substation, located at the corner of Adobe Road and Frates Road. Basic telephone service is provided by SBC and supplemented by numerous independent carriers.

The City of Petaluma maintains a water supply line along Adobe Road, approximately 500 feet north-northeast of the project site and immediately adjacent to the parcel boundary. Connection to the water line requires approval by the Petaluma City Council. An in-ground City of Petaluma sewer line extends along Casa Grande Road to the city limits, just west of the project location. Additional connections to the existing Petaluma sewer (wastewater treatment) system may not be available until completion of a new or expanded wastewater facility. Individual septic systems are also an option for wastewater treatment in this area. Water for current operations within Petaluma Adobe SHP is supplied by a DPR-owned and operated well, located on park property across Adobe Road from the project site.

Solid waste (refuse) collection for the project area is provided by Sonoma County Integrated Waste Management, which also operates the Sonoma Transfer Station, disposal location for the project area.

A single PG&E easement crosses the parcel containing the proposed project site; a portion of that easement may be within or immediate adjacent to the project APE. The easement is 50 feet in width and covers two underground transmission-pressure gas lines. Natural gas connections are not currently available at the site.

Woi	JLD THE PROJECT:	POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	NO IMPACT
a)	Exceed wastewater treatment restrictions or				$\boxtimes$
	standards of the applicable Regional Water Quality Control Board?				
b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities?	⊠ Yes	☐ No		
	Would the construction of these facilities cause significant environmental effects?				

		POTENTIALLY SIGNIFICANT IMPACT	LESS THAN SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	<u>NO</u> IMPACT
c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities?	⊠ Yes	☐ No		
	Would the construction of these facilities cause significant environmental effects?				
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources or are new or expanded entitlements needed?	G			
e)	Result in a determination, by the wastewater treatmer provider that serves or may serve the project, that is has adequate capacity to service the project's anticipated demand, in addition to the provider's existing commitments?				
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?				
g)	Comply with federal, state, and local statutes and regulations as they relate to solid waste?				

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#### **DISCUSSION**

- a) Wastewater treatment for the facilities proposed as part of this project would be provided by an on-site, County-approved septic system or, if construction of such a system is not feasible, connection to the City of Petaluma sewer system or other county-approved wastewater disposal method would be implemented prior to occupying the structures. The on-site system would by permitted and approved by the Sonoma County Permit and Resource Management Department (Environmental Health) prior to occupancy and would, therefore, be in compliance with applicable RWQCB standards and restrictions. Connection into the licensed Petaluma City sewer system would also guarantee RWQCB compliance. No impact.
- b) As noted in Discussion XVI(a) above, construction of the proposed office complex would require the construction of a County-approved, on-site septic system or connection to the City of Petaluma sewer system or other county-approved wastewater disposal method. Compliance with all local and regional permit and approval requirements, in conjunction with Mitigation Measures GEO 1-3 and HYDRO-1 would reduce any potential impacts to a less than significant level.
- c) This project proposes to construct up to four structures, a parking lot, walkways, and a driveway encroachment, adding approximately 28,320 ft<sup>2</sup> of impervious or semi-permeable surface area to the site. Alteration of the existing drainage patterns and the increase in surface area to accommodate these facilities would require design and installation of a site-specific and appropriated sized stormwater drainage system. Appropriate design and

construction, in conjunction with the implementation of Mitigation Measures GEO-2, HYDRO-3, and HYDRO-4 would reduce any potential impacts to a less than significant level.

d) Water for Petaluma Adobe SHP is currently provided from an existing well, located to the east of the Petaluma Adobe. This well is also being considered as the primary source of water for the new district office facilities. This is an aquifer-fed well and has a pumping rate of 60 gallons/minute, delivered by a 15 horsepower pump (Komar, 2003). There is no holding tank, so the water is supplied on demand from the well. A test was run where the well pumped dry after approximately 45 minutes; however, details of this test are not available for comparison to normal usage. The amount of water that would be needed for the new buildings is unknown at this time. However, estimates based on average usage (WU calculator) indicate approximately 750-1000 gallons per day would be needed. In addition to the water for human use, water would also be needed for potential fire suppression and irrigation of landscaping. Depending on actual usage, the existing well may be unable to meet the demands of the proposed project. Implementation of Mitigation Measure UTILITIES-1 below would lower the potential impacts associated with use of the existing well as the primary water source to a less than significant level.

# MITIGATION MEASURE UTILITIES-1 WATER SUPPLY

- Testing would be conducted to determine the total amount of water and rate of
  delivery necessary to adequately supply human needs, irrigation, and fire
  suppression. Tests would be based on actual or comparable usage and regulatory
  requirements. These results would then be compared to the amount of water that
  can be supplied by the existing well. Well construction and production values would
  be determined, specifically the depth of the well and the aquifer(s) screened.
- If test results indicate operations would be unable to guarantee a dependable supply of water at adequate levels to provide for human use, irrigation, and fire suppression, connection to an alternative water source, such as the existing Petaluma City water supply line that runs along Adobe Road, or construction of appropriate water storage facilities to support the increased usage would be implemented prior to occupancy.
- e) The Petaluma City Wastewater Treatment Plant serves the project area, for those facilities that are not on septic systems. Although a Petaluma City sewer line extends along Adobe Road to the northeast, with reasonably easy connection access, the existing Petaluma Wastewater Treatment Plant is at or above capacity and applications for new connections may not be approved until the new or expanded plant comes on-line (2004-07). The facilities proposed in this project would be served by an on-site septic system. Preliminary test results indicate an engineered mound system would be appropriate for this location. No impact to any wastewater treatment provider.
- f) As noted in the Environmental Setting above, solid waste (refuse) from the project site would be disposed of at the Sonoma Transfer Station on Stage Gulch Road, approximately four miles away. Disposal requirements for the facilities would be minimal,

both during and following construction and would result in an insignificant increase in total processed tonnage. The Sonoma Transfer Station is not at or near capacity. Less than significant impact.

g) See Discussion XVI(f) above. The proposed work does not have a solid waste component, although some solid waste would be generated during construction. Once the facility is in operation, waste would be disposed of as required by Sonoma County and other applicable state and local regulations. Therefore, no impact would result from this project.

# CHAPTER 4 MANDATORY FINDINGS OF SIGNIFICANCE

		POTENTIALLY SIGNIFICANT IMPACT	SIGNIFICANT WITH MITIGATION	LESS THAN SIGNIFICANT IMPACT	<u>NO</u> IMPACT
Wou	JLD THE PROJECT:				
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal commeduce the number or restrict the range of a rare of endangered plant or animal?	n munity,			
b)	Have the potential to eliminate important examples of the major periods of California history or prehistory?	s 🗆			
c)	Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means the incremental effects of a project are considerable when viewed in connectio with the effects of past projects, other current project and probably future projects?)				
d)	Have environmental effects that will cause substantial adverse effects on humans, either director indirectly?	ctly			

# **DISCUSSION**

- a) The proposed project was evaluated for potential significant adverse impacts to the natural environment. The project site does not support any native plant communities or special status plants. It has been determined that the project would have the potential to degrade the quality of the potential nesting habitat for sensitive raptor species and reduce the number or restrict the range of a rare or endangered plant or animal (federally threatened Central California Coast steelhead trout). The project also has the potential to interfere with normal migratory paths; disrupt established drainage patterns; and increase siltation, directional runoff, and erosion. However, full implementation of all mitigation measures incorporated into this project would avoid or reduce these potential impacts, both individually and cumulatively, to a less than significant level.
- b) The proposed project site was evaluated for potential significant adverse impacts to the cultural resources of Petaluma Adobe SHP. It has been determined that much of the work proposed in this project would not have the potential to cause a significant adverse impact to the Adobe's National Register status or associated cultural landscape. However, given the proximity of the project APE to the Adobe grounds and documented prehistoric sites in the area, ground-disturbing activities proposed by the project could inadvertently expose and significantly impact previously unrecorded prehistoric or historic features or

archaeological resources. However, full implementation of all mitigation measures incorporated into this project would reduce those impacts, both individually and cumulatively, to a less than significant level.

c) DPR often has other smaller maintenance programs and rehabilitation projects planned for a park unit. At Petaluma Adobe SHP, this includes continued reconstruction/ rehabilitation of the rock foundations and veranda footings at the Petaluma Adobe. However, as noted earlier in this document, the parcel containing the proposed project site has remained fallow since it was acquired by DPR and no additional work is planned, except as included in this project, in the vicinity of the project site for the foreseeable future. Work at the Adobe would not contribute to direct or indirect impacts associated with this project.

In addition to work within Petaluma Adobe SHP, projects conducted by agencies other than DPR may also affect the project site and the significance of any potential impacts to the environment. Projects in the vicinity of the proposed project that are planned, in progress, or recently completed include:

- Asphalt concrete overlay on Arnold Drive, Adobe Road, and River Road; widening on River Road; and construction of metal beam guard railing is currently in progress.
   Adobe Road is the northeast boundary of the parcel containing the proposed project site and a cross street to Casa Grande Road. Work is being conducted by the Sonoma County Department of Transportation and Public Works.
- Installation of a 420MVA 230/115KV transmission transformer bank at the PG&E Lakeville Substation during Fall 2003.

However, impacts from environmental issues addressed in this evaluation do not overlap with these additional projects in such a way as to result in cumulative impacts that are greater than the sum of the parts or that result in a significant adverse impact that cannot be mitigated. Full implementation of all mitigation measures associated with this and other projects would reduce any potential impact, both individually and cumulatively, to a less than significant level.

d) Most project-related environmental effects have been determined to pose a less than significant impact on humans. However, possible impacts from construction emissions (Air Quality), construction accidents and fire (Hazards and Hazardous Wastes), earthquake and unstable soils (Geology and Soils), mudflows (Hydrology and Water Quality), and noise have the potential to result in significant adverse effects on humans. These potentially significant adverse impacts would be reduced to a less than significant level if all mitigation measures incorporated into this project are fully implemented.

# CHAPTER 5 SUMMARY OF MITIGATION MEASURES

The following mitigation measures would be implemented by DPR as part of the Diablo Vista District Office Project.

## AIR QUALITY

#### **MITIGATION MEASURE AIR-1**

- All active construction areas would be watered at least twice daily during dry, dusty conditions. Suspend any activities that cause visible dust plumes that cannot be controlled by watering.
- All trucks hauling soil, sand, or other loose materials would be covered or required to maintain at least two feet of freeboard.
- All equipment engines would be maintained in good condition, in proper tune (according to manufacturer's specifications), and in compliance with all State and federal requirements.
- Excavation and grading activities would be suspended when sustained winds exceed 25 mph; instantaneous gusts exceed 35 mph.
- Sweep all access points to existing paved roads with water sweepers at completion of daily activities if visible soil material is deposited onto the adjoining roads.
- Revegetate disturbed areas as guickly as feasible following completion of construction.

# BIOLOGICAL RESOURCES MITIGATION MEASURE BIO-1

• If tree removal is necessary during the nesting season (February 15 - June 1), preconstruction surveys would be conducted under the supervision of the District resource ecologist to determine if nesting birds are present. If nests are identified, trees containing nests would be flagged and a buffer zone established around the tree(s) to prevent disturbance. No trees containing nests would be removed during the nesting season.

# CULTURAL RESOURCES MITIGATION MEASURE CULT-1

A DPR-qualified cultural resource specialist would monitor all ground-disturbing work. If
potentially significant resources are unearthed, work in the immediate area of the find
would be temporarily halted or diverted until identification and proper treatments are
determined and implemented. The DPR Service Center or District Cultural Resource
Section would be notified a minimum of three weeks prior to the start of ground-disturbing
work to schedule monitoring, unless other arrangements are made in advance.

## **MITIGATION MEASURE CULT-2**

In the event that human remains are discovered, work would cease immediately in the area of the find and the project manager/site supervisor would notify the appropriate DPR personnel. Any human remains and/or funerary objects would be left in place or returned to the point of discovery and covered with soil. The DPR Sector Superintendent (or authorized representative) would notify the Country Coroner, in accordance with 7050.5 of the California Health and Safety Code, and the Native American Heritage Commission (or Tribal Representative. If a Native American monitor is on-site at the time of the discovery, the monitor would be responsible for notifying the appropriate Native American authorities.

If the coroner or tribal representative determines the remains represent Native American interment, the NAHC in Sacramento and/or tribe would be consulted to identify the most likely descendants and appropriate disposition of the remains. Work would not resume in the area of the find until proper disposition is complete (PRC 5097.98). No human remains or funerary objects would be cleaned, photographed, analyzed, or removed from the site prior to determination.

If it is determined the find indicates a sacred or religious site, the site would be avoided to the maximum extent practicable. Formal consultation with the State Historic Preservation Office and review by the Native American Heritage Commission/Tribal Cultural representative would also occur as necessary to define additional site mitigation or future restrictions.

# GEOLOGY AND SOILS MITIGATION MEASURE GEO-1

- Structures and foundations proposed as part of this project would conform to the
  earthquake design requirements in Chapter 16, Division IV of the most recent accepted
  edition of the California Building Code (CBC). The design criteria would be for Seismic
  Zone 4, adapted for soil type [possibly S<sub>D</sub> (stiff soil)] as indicated in Table 16-J, of the
  2001 CBC. The information from the proposed geo-technical investigation indicated
  below would determine the actual soil type present.
- A geotechnical site investigation would be conducted prior to finalizing design plans to
  determine soil type, depth to groundwater, liquefaction potential, presence of undesirable
  expansive soils, and potential for landslides. If it is not feasible to conduct an investigation
  prior to the start of construction, the worst- case scenario for seismic impact would be
  assumed (liquefaction possible, expansive clay soils present) and designs adjusted
  accordingly.

## **MITIGATION MEASURE GEO-2**

 DPR, Sonoma County, NPDES, and/or San Francisco Bay Regional Water Quality Control Board (SFBRWQCB) approved Best Management Practices (BMPs) would be used in all areas to control soil and surface water runoff during excavation, trenching,

- and grading. If ground disturbing operations must occur during the rainy season (October 31 to May 1), or if unseasonable storms are anticipated during construction, "winterizing" would occur, including the covering (tarping) of any stockpiled soils and the use of temporary erosion control methods to protect disturbed soil.
- Temporary erosion control measures would be used during all soil disturbing activities
  and until all disturbed soil has been stabilized (re-compacted, revegetated, etc.) This
  would include, but not be limited to, the use of silt fences, straw bales, or straw or rice
  coir rolls to prevent soil loss and siltation into nearby water bodies.
- Permanent erosion controls would be implemented, including proper compaction and revegetation of disturbed soil areas, as soon as feasible following construction.
- The State's contractor(s) would provide an erosion control plan, including any proposed BMPs for DPR review and approval, prior to the start of any construction. DPR staff would follow previously approved BMPs.
- Site drainage would be directed to the southwest, away from Adobe Creek, with specifics identified on construction plans and in any required Storm Water Management Plan.

#### MITIGATION MEASURE GEO-3

- A soil classification and percolation test would be conducted in the proposed leach field area(s) to determine the soil texture and percolation rate, prior to approval of the final design and location. The design of the leach field would accommodate test results, in compliance with Sonoma County and/or the design and permitting requirements of Sonoma County and/or the RWQCB.
- If soils do not permit installation of a leach field system, connection to the City of Petaluma sewer system or other county-approved wastewater disposal method would be implemented prior to occupying the structures.

## **MITIGATION MEASURE GEO-4**

- In the event of an unanticipated discovery of fossils or fossil indicators during construction, excavations in the immediate area of the find would be temporarily halted or diverted until identification and proper treatment are determined and implemented by a DPR-qualified geologist or paleontologist.
- Once any significant paleontological resources are found in a project location, a
  qualified geologist or archaeologist/paleontologist would monitor any ground-disturbing
  work in that area from that point forward.

# HAZARDS AND HAZARDOUS MATERIALS MITIGATION MEASURE HAZMAT-1

- All equipment would be inspected for leaks immediately prior to the start of construction, and regularly inspected thereafter until equipment is removed from park premises.
- The contractor(s) and/or DPR construction crew would prepare an emergency spill
  response plan prior to the start of construction and maintain a spill kit on-site
  throughout the life of the project. This plan would include a map that delineates

construction staging areas, where refueling, lubrication, and maintenance of equipment may occur. In the event of any spill or release of any chemical in any physical form at the project site or within the boundaries of Petaluma Adobe SHP during construction, the contractor would immediately notify the appropriate DPR staff (e.g., project manager, supervisor, or State Representative).

Equipment would be cleaned and repaired (other than emergency repairs) outside the
park boundaries. All contaminated water, sludge, spill residue, or other hazardous
compounds would be disposed of outside park boundaries, at a lawfully permitted or
authorized destination.

## **MITIGATION MEASURE HAZMAT-2**

- All structures and facilities constructed within the easement boundaries would conform to restrictions expressed in the deeded easement (Sonoma County Recorder, Book 271, page 93 and Book 1785, page 702) and any Memorandum of Agreement or Understanding between California State Parks and PG&E.
- Prior to finalizing site layout, DPR would submit development plans for areas within or immediately adjacent to the easement to PG&E Land Services for review regarding potential conflicts with their facilities.
- Prior to the start of construction, DPR or State's contractor would contact PG&E
   Underground Services Alert (1-800-227-2600) to have lines located and marked prior
   to any excavation in the vicinity. PG&E's Gas Maintenance and Construction
   Supervisor would be notified at least three working days before any activities in the
   vicinity of the lines to arrange for an inspector to be present.

### **MITIGATION MEASURE HAZMAT-3**

- A fire safety plan would be developed and implemented; constraints would be included in all contracts and reviewed by all project staff prior to the start of any work. Job site characteristics to reduce the potential for fire would be included.
- Spark arrestors or turbo-charging (which eliminates sparks in exhaust) and fire extinguishers would be required for all heavy equipment.
- Construction crews would be required to park vehicles away from flammable material, such as dry grass or brush. At the end of each workday, heavy equipment would be parked over mineral soil, asphalt, or concrete to reduce the chance of fire.
- Park staff would be required to have a State Park radio on site, which allows direct contact
  to California Department of Forestry and Fire Protection (CDF) and centralized dispatch
  center, to facilitate the rapid dispatch of control crews and equipment in case of a fire. Fire
  suppression equipment would also be available on park grounds.

## **MITIGATION MEASURE HAZMAT-4**

 Areas surrounding any structures would be cleared of flammable materials and eucalyptus trees to a minimum distance of 30 feet, in compliance with the California Fire Plan, Pre-Fire Management guidelines. A Defensible Space Vegetation Management Plan would be prepared and implemented in compliance with County of Sonoma Department of Emergency Services (Fire Services) requirements.

- Flammability and drought tolerance would be considered a priority when selecting native
  plant materials used for revegetation and landscaping. Final selections and landscaping
  design would be subject to District resource ecologist review and approval.
- A fire suppression system would be installed in all structures, including fire sprinklers, as required by the Sonoma County Fire Sprinkler Ordinance (effective May 27, 2003); California Building Code Standards 9-1, 9-2, and 9-3; and the State Fire Marshall, and in accordance with the County of Sonoma Department of Emergency Services commercial fire sprinkler installation guidelines. If the existing well is used to supply water for fire suppression, a holding tank, pressure tank system, and fire pump system would be installed, as necessary, to achieve adequate pressure and provide a sufficient volume of water. System would be approved and operational prior to occupancy.

# HYDROLOGY AND WATER QUALITY MITIGATION MEASURE HYDRO-1

• The project would be in compliance with all applicable water quality standards and waste discharge requirements as specified in the SFBRWQCB Basin Plan.

## **MITIGATION MEASURE HYDRO-2**

- If the existing well is being considered as the primary water source, testing would be conducted to determine the total amount of water and rate of delivery necessary to adequately supply human needs, irrigation, and fire suppression during normal operations of the new office(s). Tests would be based on actual or comparable usage and regulatory requirements. These results would then be compared to the amount of water currently being supplied by the well to determine the changes in amount and pattern of use. Well construction and production values would be determined, specifically the depth of the well and the aquifer(s) screened. An aquifer test should be performed to determine aquifer characteristics and calculate the cone of depression for the well, to determine if the drawdown could impact Adobe Creek. Data on aquifer characteristics from other agency sources would be used, when available, to approximate the amount of drawdown.
- If test results indicate operations could result in sufficient drawdown to potentially impact groundwater recharge, with an associated lowering of the local groundwater table level, or insufficient capacity for a dependable water supply [see Discussion XVI(d)], connection to an alternative water source, such as the existing Petaluma City water supply line that runs along Adobe Road, or construction of appropriate water storage facilities to support the increased usage would be implemented prior to occupancy.

#### **MITIGATION MEASURE HYDRO-3**

 A site-specific and appropriated sized stormwater drainage system would be designed and installed, in compliance with the SFBRWQCB and National Pollutant Discharge Elimination System (NPDES) Permitting Program requirements and guidelines.

## MITIGATION MEASURE HYDRO-4

Site topography would remain consistent with the existing 3% - 4% slope.

#### Noise

## **MITIGATION MEASURE NOISE-1**

- Construction activities would generally be limited to daylight hours, between 7 am and 7 pm. Work on weekends and holidays would not begin prior to 8 am.
- Internal combustion engines used for any purpose at the job site would be equipped
  with a muffler of a type recommended by the manufacturer. Equipment and trucks
  used for construction would utilize the best available noise control techniques (e.g.,
  engine enclosures, acoustically-attenuating shields or shrouds, intake silencers, ducts,
  etc.) whenever feasible and necessary.
- Stationary noise sources and staging areas would be located as far from sensitive receptors as possible. If they must be located near sensitive receptors, stationary noise sources would be muffled to the extent feasible and/or, where practicable, enclosed within temporary sheds.

# **UTILITIES**

## **MITIGATION MEASURE UTILITIES-1**

- Testing would be conducted to determine the total amount of water and rate of delivery necessary to adequately supply human needs, irrigation, and fire suppression. Tests would be based on actual or comparable usage and regulatory requirements. These results would then be compared to the amount of water that can be supplied by the existing well. Well construction and production values would be determined, specifically the depth of the well and the aquifer(s) screened.
- If test results indicate operations would be unable to guarantee a dependable supply of
  water at adequate levels to provide for human use, irrigation, and fire suppression,
  connection to an alternative water source, such as the existing Petaluma City water
  supply line that runs along Adobe Road, or construction of appropriate water storage
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## REPORT PREPARATION

#### CALIFORNIA DEPARTMENT OF PARKS AND RECREATION

Kathleen Considine, CEG
State Engineering Geologist
Northern Service Center

Dionne Gruver
Associate State Archaeologist
Northern Service Center

Marla Hastings Senior Resource Ecologist Diablo Vista District

Roy McNamee Park Maintenance Supervisor Diablo Vista District

William Orme Senior Resource Ecologist Northern Service Center

Shaelyn Raab Strattan
Environmental Coordinator
Northern Service Center

Lorrie Thomas-Dossett
Park Maintenance Chief II
Diablo Vista District

Sue Worley
Assistant Resource Ecologist
Northern Service Center